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ORIGINAL ARTICLES.

GENERAL CONSIDERATIONS ON THE ANATOMY OF THE VENOUS SYSTEM OF THE LOWER EXTREMITY.*

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From the complex mechanism of the venous-system of the lower limb, the provisions of economy in supplying so many supplementary valvular supports, a multiplicity of anastomotic communications, and additional density and thickness to the vascular walls, it is apparent that, from the aspect of hydraulics, the perfection in development has been reached. It remains to give a cursory glance at the physiology of this region, before passing to morbid conditions.

Passing before the femoral artery, but few unimportant branches are given off until the vicinity of the knee joint is reached; and, after this isthmus is crossed and the popliteal artery bifurcates, but few arterial offshoots spring out until the ankle joint is reached. Few, except small branches to the muscles, leave the descending trunks of the anterior and posterior tibial and the peroneal arteries down to this point, where there exists a network of arteries encircling the articulation. Finally, these vessels are lost in the plantar arches, destined to supply the powerful osteo-arthritic mechanism of the foot, its appendages and investments. The joints demand an abundant nutrition.

The foot, because of its functions as the pedestal of the body besides being its motor, is powerfully constructed and must have a generous arterial supply. Its position and its peculiar mechanism favor and protect the arterial torrent, but trouble comes with the vessels which carry the blood back to the center of the circulation. The movement of the arterial blood is favored by gravity, here, since there is a sharp descent in ample vessels. But, difficulty is encountered after the blood leaves the capillaries on its return. To meet this a duplex set of vessels, deep and superficial, has been provided and these are in close communication with each other.

On close inspection of these vessels it will be found that the capacity of the superficial set is much greater in the leg than the deep; while above the knee, in the thigh as we approach the body it is about the same. Why should the subcutaneous veins of the leg be generally of a greater capacity than the deeper? Is it because the functional activity of the integument here is so much greater than any other area of the body, greater than over the thorax or the abdomen?

* Read from title at the Pan-American Medical Congress in Mexico, October, 1896.

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Apparently not, for there appears no greater evidence of glandular activity, under thermal or other influences, than elsewhere, nor do the histologic elements in the integument imply it. This being conceded the only rational explanation of the peculiar development of the superficial or subcutaneous veins, is that they are auxilliary or relief vessels to the deeper, the intermuscular veins which are unequal to the task unassisted, of returning the venous blood from the feet and ankles. The arrangement of the valves in the anastomatic currents points to this conclusion, as they allow the venous stream to course only toward the periphery. Besides anatomic and physiologic facts incontestably demonstrate that the investing cuticle of the foot calls for no such augmented venous development.

Further up the leg it will be observed that the peripheral superficial tributaries from the leg have converged, the external saphenous has penetrated the deep fascia and joined the popliteal, and at the knee there is a plexus of venous radicles converging, to join with the internal saphenous, the venae comites of the anastomatica magna and the long deep terminals of the profunda femoris. After this level all the larger venous trunks except the internal saphenous become intermuscular and are more deeply lodged.

After the saphenous opening is approached all the superficial veins of the penis, the inguinal region of the abdomen and the lower two-thirds of the thigh, its inner aspect and its superficial and deep structures have passed their contents into the common femoral. Above this boundary there is yet a separate set of veins of great importance.

The gluteal veins and their tributaries are deeply lodged. The two principal trunks lie in close contact with the main divisions of the sciatic nerve, the popliteal division receiving the long spiral branches which advance upward on either side of its sheath. The gluteal veins enter the pelvis through the great sacro-sciatic notch and empty into the internal iliac.

The ileo-lumbar, the lateral sacral, the obturator sciatic and pudic vessels, in fact all the veins within the pelvis, the tributaries of both divisions of the internal iliac vein deserve special notice in this study, as their contents are all influenced by gravity and their functions are often disturbed by intra-pelvic pressure, or other disordered conditions.

Here may be considered with profit the morbid anatomy and pathology of the varicose state, its complications and sequelae.

The pathology of varix is very complex, and in certain types remains as yet very imperfectly understood. The principal factors involved are: (1) changes in the blood (humoral); (2) physiologic conditions; (3) local conditions (mechanical); (4) structural arrangement (anatomical).

Laucereaux believed that the veins are in a great measure subordinate to the influence of the nervous system, to changes transmitted through the vaso-motor nerves, to trophic inhibition.

There can be no doubt but that general and local alterations in the blood are one important pathologic element in multiple varix, in a considerable number of cases. The excess of uric acid in gout, lactic acid in rheumatism, blood changes in scurvy and in syphilis, and general impoverishment of the system, as well as the opposite condition of excessive plethora and plasticity of the blood, must contribute their share in the diseased condition of the vessels.

Oliver[2] enumerates increased density of the blood, increase in the corpuscular elements with the pendant position of the limbs, with the blocking of the finer capillaries as leading to interstitial degeneration of the vascular walls. Local injuries may result in a rupture of the venous walls with extravasation of blood into the tissues, damage to the endothelial lining, stasis, inflammation and coagulation; but, *per se*, the condition cannot produce trauma.

In varix of long duration, there often exists territories of convolutions filled with grumous, tarry disintegrated blood. In these cases the blood makes its way upward by a circuitous route, the current in places being long delayed, its density increasing by dehygration of the aqueous elements and escapes into the connective tissues, the so-called inflammatory edema; resulting from a transudation of the unchanged plasmic elements.

The venous blood passing through large areas of diseased vessels can scarcely

escape contamination, by its own disorganized elements, such as embolic fragments of fibrin and other materials, the products of disintegration. The passage of displaced infected blood clots from the smaller veins into the larger, where they are liable to become engaged in the valves or at the points of inosculation may provoke a secondary phlebitis with a weakening of the vascular walls and dilatation; or the coagulated elements of the blood may be carried directly into the cava and cardiac chambers, and only engage as infarcts in the ramifications of the pulmonary artery. It would be interesting to estimate the role that this pathologic process plays in so-called pulmonary apoplexy or in pulmonary gangrene.

Jackson[3], of Calcutta, has reported three cases of hepatic abscess succeeding the ablation of hemorrhoidal tumors. Cruveilhier[4] has observed the same lesion after prolonged taxis in strangulated hernia. Dance[5] twice saw the same occur, once after an operation for fistula in ano and again after the reduction of a strangulated hernia. Frierich, in his own practice, saw suppurative phlebitis follow embolism in the portal vein and cites other cases from the writings of Oppalzer and Strumpfel. In typhoid, tubercular or cancerous ulceration in close contact with any of the large veins thrombotic occlusion of these vessels is liable to occur; which, when displaced and carried upward in the sanguineous tide may give rise to infarcts or local ulceration in the tissues where it finds lodgment.

Charcot[6] has cited cases of such agonizing pain of the leg that amputation alone relieved it, and he notes that in all these cases the flaps sloughed. Invariably both the main artery and vein were occluded by fresh thrombi. Bouley[7] had noticed horses suddenly limp in the hind leg and fall in the handicap. When killed, the main artery and vein were found tightly plugged by thrombi.

At the Medico-Chirurgical Institute, in Berlin, in 1845, Virchow[8] submitted to the profession his conclusions on embolism from an experimental and clinical standpoint. The occasion became historic because the subject was so presented as to win for itself a permanent position in the domain of pathology. He incontestably demonstrated that vascular obstruction from blood clots was something more than a mere cadaveric phenomenon, that it was a morbid change of a pathologic order. It remained for Bertin[9], with several other investigators, to extend the study to lesions of the peripheral vessels, especially the veins.

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[2] *Diseases of the Liver*, FRIERICH'S, p. 620.
[3] Anat. Path., vol. I, p. 16.
[4] *De la Phlebites Uterine et de la Phlebite Generale-Brochure*, p. 117.
[5] *Claudication Intermittante Acute des Extremities Path. Externale.*
[6] HERFELAND, on *Phlebitis*, p. 76.
[7] Ueber-Verstop, 1846, No. 794.
[8] *Etude Critique de l'Emboli Par.* M. BERTIN, *Embolie des Urines des Members Inf.*

A CASE OF INTEREST.

A case of interest to physicians generally was decided by Judge Dunbar, at Boston, recently. The circumstances of the case, as reported, were that previous to May 1, 1896, Dr. Oscar F. George had a lucrative practice in Lynn. On that date he sold it to Dr. Edward B. Herrick, who came from Amherst, Mass., signing an agreement not to practice in the city as long as Dr. Herrick remained there. He then went to Newburyport, and later to Vermont, and about March 1, 1897, came to Swampscott, where he located and resumed practice, and, as he admitted on the witness stand, again began practice among his old patients in Lynn. Dr. Herrick brought a bill in equity in the Superior Court against Dr. George to have him restrained from practicing in Lynn. As a result Judge Dunbar enjoined the defendant from practicing in Lynn in violation of his promise. The decision is important from the fact that while the defendant admitted that morally he was bound to keep his agreement, legally he was not so bound. The judge, however, decided that he was both legally and morally bound to keep his agreement, and enjoined the defendant from further trespassing upon the ground to which he has signed away all claim.—*Boston Medical and Surgical Journal.*

STARVATION AND GRIP.

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May 10, 1897, an interesting case came under observation. A boy, 14½ years old, had been taken with measles, in December, 1896. While convalescing he was attacked with grip. He had always been sickly, and had been dosed to a great extent with patent medicines. In an old mill race near the house occupied by the family there were, by actual count, two hundred and fifty empty patent medicine bottles. At the time of beginning treatment the patient was consuming one pint bottle of a kidney "specific," and an equally large bottle of another vaunted remedy, every two days, besides various other kinds at irregular intervals.

The family have been so poverty-stricken during the past six months, that the patient's diet part of the time was a slice of bread with some salt, three times a day; and for the balance of the period, three raw eggs daily.

On the date mentioned, the boy looked like the picture of an Andersonville prisoner after the war. With the fingers of one hand it was possible to span around the thigh at any point. There were dyspnea, hysteria, idiocy, heart failure, and a wilderness of replexes.

Treatment was inaugurated by shutting off the supply of patent medicines. One of the so-called tasteless preparations of cod liver oil was prescribed for the purpose of supplying the boy and his friends with fat. The physician who can explain to ordinary people how the combustion of fat in the body supplies heat, and does away with the necessity for hot bricks, is regarded as a little lower than the angels. Most of us are not equal to such a sight draft on our mental resources, and cannot help wondering why some part of our Alma Mater did not tell us about something which we were likely to meet in practice.

Of prime importance was the question of nourishment. The boy had almost forgotten how to swallow food, and was at last persuaded, with difficulty, to take malted milk. It was not given because of any special belief in statements made on the circular around the bottle, but on account of the taste seeming to strike the obstinacy-center in the boy's brain.

He complained bitterly of tympanites for several days after taking the food. On the fourth day of its use, he passed casts of the intestinal canal aggregating twenty inches in length. The membranous enteritis must have been a symptom of blennorrhagic disease caused by starvation and grip. The profuse mucous discharge from the upper end of the alimentary tract was constantly being expectorated; but down in the belly it had to accumulate and coagulate. Then it would act as a foreign body to imitate the portion of the sympathetic nervous system, which controls digestion.

Lavage might have gotten some credit to itself in this case, but the patient was poor; and anyway, water enough to satisfy our professional Noahs would not have touched the top root of the evil. If it had been possible to pump the stomach and bowels full of an antiseptic fluid, and then cause evacuation, something brilliant might have happened. We are short on our facts, when it comes to estimating the quantity of water, which an empty abdominal cavity will hold. Here is a problem for German scientists to solve. By experiments on dogs, they may some day be able to express in the metric system the difference between watery peristalsis and paralysis. Even an American can see, if he has a nose for science, how such a discovery will be of more value than the higher criticism of tuberculosis, or the air ship.

Pain, diarrhea, dyspepsia, would naturally result from the membranous enteritis. Abnormal peristaltic and reflex action would bring away the little food which could be taken, undigested.

To overcome so much as possible the tendency of the alimentary tract to monopolize the supply of blood and nervous

force, massage of the extremities was resorted to. Every morning the muscles were thoroughly kneaded. Women who are in the habit of allowing the ovaries to keep house, can often be managed in the same way.

In one week the smallest sized bottle of malted milk could be taken in twenty-four hours. A few days later twice that quantity was being consumed. The boy was now taken out of doors every morning, when it did not rain, and literally driven about for the sake of getting fresh air. For six months he had been shut up in one room, with four other people, and was deprived of the necessary amount of oxygen.

Massage was expected to stimulate the circulatory system, and in conjunction with the liquid food, act as a tonic, to the jaded nervous system. Fresh air supplied to the lungs under these conditions could be inspired well. Assimilation and metabolism were more likely to go on right, and growth of muscular tissue and nervous energy would be assured.

At first it was hard work to secure coördination of the boy's functions and faculties. He was as dull as a chunk of protoplasm, existing without realizing life. Bathing had a beneficial effect. *En parenthese* when all reasoning fails to persuade people to bathe sufficiently it can often be done, if the subject be a female, by use of the argument that bathing produces beauty. There is an air of refinement about the habitue of soap and water. Proper cleanliness may not be a test of civilization and intellectuality, but it does make the hair glossy, and the skin cultured and polished.

Just so soon as this patient improves sufficiently to be discharged, he will be taught to take systematic exercise, morning and evening. Five minutes exercise before breakfast and before retiring at night, will work a transformation in his life. Dancing and swaying back and forth, on the ball of the foot, will give the lower extremities vigorous motion, and cause symmetrical development. At the same time it will give the abdominal cavity a shaking up, which will act as an appetizer, and help to prevent constipation. Motion with the arms to imitate swimming, or the Indian club motion without clubs, should accompany the leg exercise. It gives the arms the motion needed to make them well developed and graceful; and expansion of the chest is sure to be obtained. At night such systematic muscular movement will give the entire body that comfortable tired feeling, so conducive to sound sleep. More than that, it will withdraw the blood from congested portions of the body, and distribute it equitably. Brain workers who have resorted to this simple expedient have often been cured of insomnia.

Conclusions:—Fat to furnish fuel for muscular and nervous energy; food which can be assimilated; exercise; oxygen; and bathing, are the necessaries to combat starvation complicated by grip.

It is a mistake to work when you are not in a fit condition to do so. To take off heavy underclothing out of season, simply because you have become overheated. To think that the more a person eats the healthier and stronger he will become. To believe that children can do as much work as grown people, and that the more they study the more they learn. To go to bed late at night and rise at daybreak and imagine that every hour taken from sleep is an hour gained. To imagine that if a little work or exercise is good, violent or prolonged exercise is better. To conclude that the smallest room in the house is large enough to sleep in. To sleep exposed to a direct draught at any season. To think any nostrum or patent medicine is a specific for all the diseases that flesh is heir to. To imagine that whatever remedy causes one to feel immediately better—as alcoholic stimulants—is good for the system, without regard to the after effects. To eat as if you had only a minute in which to finish the meal, or to eat without an appetite, or to continue after it has been satisfied merely to gratify the taste. To give unnecessary time to a certain established routine of housekeeping when it could be much more profitably spent in rest or recreation. To expect a girl or woman to be handsome when the action of her lungs is dependent on the expansive nature of a cent's worth of tape.—*Philadelphia Record.*

CURRENT LITERATURE CONDENSED.

A Case of Influenza, with Persistent Respiratory Failure, in an Infant of Four Weeks.[1]

The child had been fed artificially from the age of two weeks. When four weeks old he contracted influenza, from which several members of the family were suffering at the time. After several days, during which an occasional hoarse cough was the only symptom, the child became acutely ill with signs of a localized focus of broncho-pneumonia at the root of the right lung.

Eight hours later there began a series of attacks at first characterized by a slow, spasmodic closure of the glottis associated with slight general convulsive symptoms, and later by recurring spells of apnea ceded by slowly increasing cyanosis. Individual attacks yielded at first to the warm bath and flagellation, but later required, besides, cold affusion to the chest, more severe flagellation with strips of pasteboard over back, buttocks, and finally over cheeks and side of head, oxygen inhalations, and artificial respiration by the Schultze method. Up to midnight of the first day 29 distinct attacks of alarming apnoea had been counted, and during the next twelve hours fully as many, if not more, occurred.

The treatment embraced bromids at hourly intervals till complete relaxation was obtained, tincture of digitalis in half drop doses every two hours, atropin sulphate hypodermatically in doses of 1-1500 grain about every three hours. After 30 hours, when it did not seem that there was any hope of recovery, one-half grain of antipyrin hypodermatically was given, with what seemed to be immediate improvement, and after six hours the child was practically out of danger, except for the general weakness which threatened to render efforts at cough ineffectual.

Under stimulating treatment, aided by irritation of the nares by the fumes of ammonium salts, expectoration was established and the baby made rapid and complete recovery. Three doses of antipyrin were given, the last one about sixteen hours after the more severe symptoms had subsided, when the tendency to cyanosis again became alarming. This was followed by a prompt and definite cessation of all alarming respiratory symptoms. The only sequel of the disease was the alternating internal strabismus, which lasted for several weeks and then gradually disappeared without special treatment.

At the outset the attacks of respiratory suspension were spasmodic in character, apparently depending upon a condition of irritability of the laryngeal mucous membrane which in older children affected during the recent epidemic caused a cough closely simulating that of pertussus or the prodromal stage of measles. Later on the increasing stupor and tendency to convulsion (accompanied by what was evidently centric failure of respiration) and the residual strabismus pointed to pressure at the base of the brain, probably quite limited in extent, and possibly to some extent involving the medulla.

[1] Dr. Thompson S. Westcott, before the Philadelphia Pediatric Society.

Natal Teeth.[2]

The child was about four weeks of age and breast fed. The father is a German, the mother an American. They are both healthy and the family history is good.

The tooth, which is a lower right central incisor, was noticed by the nurse a few hours after birth. The mother herself states that she saw it the following day and a physician saw it on his next visit, so there is no question that the tooth was present at birth. The tooth is rather badly formed, the cutting edge is slightly conical and it is rather a poor color.

The child is full term baby, fairly well nourished. No evidence of any unusual bony developments appear; the anterior fontanelle appears to be of normal size and the child is apparently well-formed so far as the thorax and upper portion of

[2] Dr. E. E. Graham before the Philadelphia Pediatric Society.

the limbs are concerned. The tibia are quite considerably bowed.

This is the only pregnancy and there is no history of miscarriage. The mother is 23 years of age, father 25 years of age. There is no tubercular or specific history. The father admits the use of perhaps more than a moderate amount of liquor and tobacco.

One of the interesting facts in regard to the history of the case is that the father claims that either he or one of his brothers also had teeth at birth. It is a family record that one of the children was born with teeth. Curiously enough, the mother claims the same thing, that either she or her sister was born with a tooth.

The tooth is rather loose and probably is not perfectly formed. It looks as though the incisor immediately adjacent would quickly pierce the gum. The mother complains of only slight pain in the nipple during nursing and there is no evidence of injury to the nipples by the tooth.

Typhoid Fever in a Child Three Years of Age, with Persistent High Temperature.[3]

A case of persistent high temperature which came under observation during the past winter. There were well-marked symptoms of typhoid fever, and from the beginning there was no difficulty in diagnosis. Temperature slowly rose and reached 103° at the end of the first week. For three weeks the temperature ranged between 103° and 104° and at times got as high as 105° and 106°. At the end of the fourth week the temperature slowly began to fall. At this time the case presented the appearance that a typhoid generally does at the beginning of convalescence. At the expiration of the fourth week the child had intestinal hemorrhage, extending over several days, and grew rapidly worse, the temperature falling immediately to rise to 105° to 106°, and remained at this height until its termination some two weeks later in death.

The case is of interest as presenting the *persistent* high temperature and the intestinal hemorrhage, which is, comparatively speaking, rare in children.

Dr. W. A. N. Dorland has placed in the hands of the author the chart showing the temperature range of a case of typhoid which came under his observation, which shows very markedly and beautifully the typical remittent course of temperature as it frequently occurs in childhood.

The experience of writers as well as of observers upon the subject is that the temperature runs a modified course, usually remittent in character in young children and early puberty. This certainly has not been my own experience, nor has it been the experience of a number of men who have had a large experience, but have written very little upon this subject in connection with this disease.

The temperature charts to which the author had access, some cases in the Pennsylvania Hospital, and several in the Children's Hospital, show the temperature instead of being remittent type, pursuing the course that it does in adults, except possibly somewhat modified. The case quoted is one which presents rather the temperature which you would expect to find in a severe case of typhoid in an adult. The chart presented by Dr. Dorland presents the remittent type of typhoid.

In the so-called abortive typhoids and those which show a marked remission reaching almost the normal point, Dr. Leidy was inclined to believe if the blood had been carefully examined, had there been as much known about the subject of malaria a few years ago as we know now, many of them would have turned out to be cases of malaria and not typhoid fever.

We have all seen cases of so-called remittent typhoid fever in early life, but certainly great care must be exercised in diagnosing cases of this type. The course of fever during obscure cases of entero-colitis at times makes the diagnosis, without pathognomonic signs, a question. In connection with such cases the term "inanimate fevers" has been suggested until we are better able to make a positive diagnosis.

Suppurative Osteomyelitis of the Tibia.[4]

The patient was a child aged 2½ years, in the service of Dr. H. R. Wharton at the Children's Hospital. The entire diaphysis of the tibia was removed as a sequestrum in one piece. The patient suffered from continuous high fever from the time of

[3] Dr. Joseph Leidy before the Philadelphia Pediatric Society.

[4] Dr. J. H. Jopson before the Philadelphia Pediatric Society.

admission, and finally died of septic pyemia.

Autopsy showed besides areas of necrosis in the viscera and catarrhal pneumonia, what were apparently healing typhoidal ulcers in the intestine. The suppurative osteomyelitis was probably post-typhoidal, the result of a mixed infection.

It has been shown in these cases that the Eberth bacillus alone may cause a form of osteomyelitis. Usually circumscribed and terminating either in resolution, caseation, or liquefaction, in the latter cases with or without the production of small sequestra. It may also by weakening the resistance of the medullary tissues furnish a nidus for the implantation of the pyogenic cocci, especially the staphylococcus pyogenes aureus.

The first form is usually chronic with little tendency to spontaneous healing when a sinus forms, and to effect a cure a thorough removal of the diseased tissues is necessary. The latter form does not differ from ordinary suppurative osteomyelitis, and like it demands early and radical operative treatment.

Typhoid Fever in a Suckling.[5]

The patient, aged 25 months, was admitted to the wards of Dr. Donellan at St. Mary's Hospital. The mother had suckled the baby during the first two weeks of a course of typhoid and died in the same Hospital four days before the child's admission. When the baby came under Dr. Kelly's charge it was irritable, slept badly and had anorexia, coated tongue, fever and diarrhea. The abdomen was distended, the spleen palpable, spots were present and there was gurgling. The urine was negative.

The treatment was repeated minute doses of calomel followed by milk diet. Cool sponging when the temperature was above 102° (only four times) and small doses of salol and whiskey. There were no complications, and the child was discharged well after three weeks.

The temperature and source of infection were of interest. As to the latter, Dr. Kelly had been unable to find reported examples of typhoid bacilli found in mother's milk (staphylococci have been repeatedly discovered), but thought this a not improbable source since they have been found so widely distributed in the organs after death and in the blood, sputum, urine, etc., during life. Cow's milk, water, or contaminated bed-clothing might, however, have been the source.

The temperature was markedly irregular, showing diurnal variations of as much as 4.5°, and sometimes showed the normal type, being lowest in the evening. It reached normal on the eighth day after admission after rapid lysis, but showed slight variations for a week later.

The Physiology of the Adrenals.[6]

The points to which he has directed his particular attention are the vaso-motor nerves and the secretory nerves of these organs. He describes in detail the operative procedure he adopted in his experiments, and arrives at the conclusion that certain vasodilator fibres run in the splanchnic nerves to the adrenals, partly because no other explanation can be offered of the rapidity with which hyperemia follows stimulation of these nerves, partly on account of the steady increase of the hyperemia as the stimulation is continued, and partly because of its continuance for some time after the cessation of stimulation quite independently of the blood pressure in the arteries.

He has observed that in the dog the splanchnics, after traversing the diaphragm, give off on each side, before they enter into the formation of the solar plexus, a single large branch to the adrenals, and these, he believes, contain the chief vaso-dilator fibres, since, if divided, the stimulation of the splanchnics in the thorax is without influence, whilst stimulation of the distal extremities of the divided nerves is followed by active hyperemia.

From a critical review of the researches of previous investigators he considers the facts actually established in regard to the vaso-dilator nerves distributed to the abdominal viscera to be that these nerves leave the spinal cord chiefly by the anterior roots of the lower dorsal nerves and, running in the rami communicantes, enter the sympathetic in the dorsal region and are distributed with the branches of the splanchnic nerves to the large and

[5] Dr. A. O. J. Kelly before the Philadelphia Pediatric Society.

[6] Dr. Arthur Biedl, in *Pfluger's Archiv.* (*The Lancet*).

small intestine, the liver, kidneys, pancreas, and adrenals. He has satisfied himself that there are ganglia on the vessels distributed to the adrenals, and that although their presence has not been anatomically demonstrated vaso-constrictor nerves exist. The two sets of nerves, vaso-dilators and vaso-constrictors, run in the same trunks, their relative proportion varying to a considerable extent.

Dr. Biedl has devoted much time and attention to the secretory nerves of the adrenals. These organs belong to the class of those which have an internal secretion discharging the materials they elaborate into the blood. Various investigators have been led to the belief that the granules well-known to exist in the blood of mammals proceed from the adrenals. Others have shown that the venous blood of these organs resembles arterial blood in colour, and yet another observer has demonstrated that the peculiar extract of the adrenals is not a post-mortem product, but is contained in the venous blood returning from these organs during life.

Dr. Biedl, in his experiments directed especially to the determination of the changes in the morphologic elements of the venous blood and the behaviour of the extract with its peculiar action on the blood pressure, found that after stimulation of the suprarenal branch or of the splanchnic nerve in the thorax the number of bright granules or little masses of protoplasm was diminished, and at the same time the number of the leucocytes of the blood was reduced, these bodies being apparently retained within the organ.

In regard to the active extract, Dr. Biedl believes that the splanchnic nerves do not only contain vaso-dilators, but that they are also associated with the secretory nerves of the adrenals, which run in the same trunks, and that stimulation of these nerves leads to some, though not material, increase in the quantity of the active extract produced.

The Influence of Sex on the Results of Surgical Operations.[7]

In the *Progres medical* for July 10, M. Marcel Baudouin discusses the apparent fact that women bear severe surgical operations better than men do, recovering from them in a greater proportion of instances. This, it seems, is particularly the case with regard to abdominal operations. He cites certain statistics furnished by Haberkaut (Archiv fur klinische Chirurgie, 1895-1896). As regards pylorectomy and gastro-enterostomy, Haberkaut's figures show that women bear those serious operations far better than they are borne by men. For example, of a hundred and seventeen gastro-enterostomies done on men, fifty-four per cent. proved fatal, while of ninety-six performed on women, only thirty-five per cent. were followed by death—a difference of nearly twenty per cent. In pylorectomies the difference is not so great, only twelve per cent., but, nevertheless, it is decided; of seventy operations done on men, a fraction over sixty-four per cent. proved fatal, while of a hundred and forty performed on women, not quite fifty-three per cent. ended fatally.

The causes of woman's superior resistance to the dangers of grave operations have been discussed by various writers. One of the theories is that it is a peculiar attribute of the female sex; but this, says M. Baudouin, does not explain the fact. Reasoning of this sort, he remarks, has well been likened by M. Terrier to the statement of one of Moliere's characters to the effect that *l'opium endort, parce qu'il a une vertu dormitive.* Another theory is the following: Pregnancy generally induces certain changes in the abdominal walls; they become more supple, more flaccid, thinner, and more yielding. Consequently, when a woman has an intra-abdominal lesion, physical examination of the abdomen, particularly deep palpation, is enormously facilitated, and a diagnosis is made more easily and earlier than in men.

Moreover, women speak of their troubles early and are readily impressed by suggestion, so that the surgeon persuades them in good time to submit to surgical intervention, even of a serious character, for it promises to preserve their charms as well as their life. Hence they are operated upon at a less advanced period of their disease, that is, under more favorable conditions, so that they oftener recover. M. Baudouin adds that ordinarily women do not work, and are therefore more willing to enter a hospital than men, who will

[7] Editorial in *New York Medical Journal.*

not give up their occupation until they are disabled by the disease from which they are suffering. The theory, or rather the group of theories, thus set forth M. Baudouin is inclined to regard as covering the whole truth, but it seems to us that an additional fact should be taken into account—namely, the relatively greater capability of women to bear hemorrhage.

How to Prepare a Fractured Femur, or other Bone, for Transportation.[8]

The treatment of railway injuries, on account of their environments, extent of injury to the soft parts, and very frequently the distance from the place of accident to the patient's home, must necessarily be somewhat different from that of cases that arise daily to the general surgeon not like cases that we can see every day, or every hour, if need be, and by inspection see whether the parts are all right; that the circulation of the limb is good; but more often is it the case that we have to transport them long distances, that not only requires hours, but maybe days, before the injured man arrives at his journey's end. When this is the case, humanity not only demands such remedies as will relieve pain, but a splint, or dressing, that will keep the parts in perfect apposition, at the same time causing no danger from constriction.

In civil practice it is our custom to put the limb that is fractured at once in a plaster of Paris bandage; we are all united on this point, and we can get our patients in a few days on their crutches, if it is a fracture of the lower extremity; but in railway surgery, where the soft parts are generally contused and the patient has to travel a long distance to his home, the treatment by the plaster of Paris bandage at once is not safe; we cannot always tell what may be the condition of the limb 24 to 48 hours after the accident; therefore a constricting bandage may bring on not only great suffering to the patient, but might also produce mortification of the limb; then it is our duty to place the limb in a temporary splint that will hold the parts immovable, that will give him ease and comfort, and when he arrives at his journey's end he will be in as good condition as when started off.

A temporary dressing can be made that will be perfectly comfortable to the patient, with no risk of gangrene and at the same time hold the parts immovable. I refer to the "gum shellac" splint, or Paris splint, open its entire length. This is made by dissolving one pound of best gum shellac in one pint of alcohol and adding one dram of borax. To make the splint, cut out a piece of old woolen cloth long enough to reach from the extremity to the joint above the seat of fracture (I refer more especially here to the femur). Then paint over one side of this woollen cloth this solution with a brush, and dry it thoroughly before the fire. When dry, add a second coat, which is also allowed to dry. Take one or more pieces of the same material and treat in the same manner; then when placed with their prepared surfaces together, which can be united by pressing with a hot iron, will not only make a strong splint when molded to the limb, but one that is flexible and porous. These splints can be prepared at any time, in our office, and when necessary to use them trim them to suit the limb and gently heat them so as to mould them to the limb. With such a splint first envelop the limb, in dressing a fractured femur, in cotton wadding; then cut the gum shellac splint so as to encircle the limb with the exception of one or two inches, so as to allow for inspection, gently heat it and secure it by bandage, which can be allowed to remain on until the splint is thoroughly molded to the limb; then it can be removed. Here we have the limb lying in a well-padded cushion and kept in apposition by the splint.

The plaster of Paris splint, as recommended by Dr. Elliott, has proven highly successful; these can be made by taking two or three pieces of canton flannel and soaking them thoroughly in plaster of Paris, with an equal quantity of water; cut the pieces so as not to encircle the limb by one or two inches, and reaching from the extremity to joint above the seat of fracture; envelop the limb in cotton wadding as in the other splint, adjust the fracture and then apply the bandage so as to hold the parts in apposition until dry, then remove the bandage. This probably makes a stronger and firmer splint than

[8] C. H. Richardson, M D., in the *Atlanta Medical and Surgical Journal.*

the gum shellac. In either of these splints, the gum shellac or plaster of Paris, the limb being left open its entire length to allow for inspection and prevent constriction, we have a splint that will keep the parts immovable, the limb easy and comfortable to the patient until he arrives at home or his journey's end; then either of the splints can be converted into a permanent one after his arrival at the end of his journey by applying a Paris bandage around it. If the fracture be compound, openings can be made into the splint so that antiseptic dressing can be applied.

A Mathematical Problem.[9]

We learn from an exchange that Dr. J. M. Price, of Philadelphia, stands at the head, in number and success of his abdominal operations, of the noted surgeons, who have won reputations in that field of their profession, having performed over 4,000 abdominal sections. It is presumed that in most of these operations one or both ovaries were removed, and not unusually the womb and the appendages also. Now, the problem is, if one surgeon now in middle age has removed 4,000 ovaries, how many have been removed by surgeons old and young in the civilized world, for the taking out of ovaries is most emphatically a civilized procedure, and looked upon as one of the great triumphs of modern surgery. After an approximate estimate has been made it might be well to still further inquire how many of these ovaries might have been saved and restored to health by even moderate skill in the slower application of therapeutic methods.

An incident occurred in this city recently where both ovaries were removed by a distinguished gynecologist. As they lay upon the table one of the assistants said: "These ovaries do not seem to be diseased." "No," was the reply, "but they may just as well come out, as it will only prevent her having children." It requires more skill to know when to cut than how to cut. The latter requires anatomic knowledge and mechanic dexterity, the former an intimate knowledge of pathologic conditions and the action of remedial agents.

[9] Editorial in *Medical Times* (New York.)

In this connection one word might be said in reference to the treatment of the nose and throat. The knife may, of course, often be used with benefit in clipping the palate or excising the tonsils, and the saw in removing obstructions in the nasal passages, but it is a question of chronic catarrh, in which the membrane is thickened or ulcerated, may not be treated with better results in the end with natural remedies and local applications than with the cautery, which destroys the tissues so that the original functions can never be restored. The moral of all this is that while the good physician may not always be a good surgeon through lack of mechanical dexterity, the good surgeon should always be a good physician, thoroughly versed not only in pathologic conditions and the causes which lead to them, but in chemic combinations and the action of therapeutic agents in health and disease.

A Silver Wedding.

Professor Dr. Freidrich Von Esmarch, of Kiel University, and his wife have just celebrated their silver weddoing; the former being over seventy-four years old. He won his surgical experience and reputation in his service for the wounded during the great wars of 1866 to 1870. February 28, 1872, he married, as his second wife, Princess Henrietta Elizabeth, of Schleswig-Holstein, whose life he had saved by na operation. Since his marriage Dr. Von Esmarch (who was made a hereditary "Von" in 1887) has lived at Kiel, where the clinical records show that he has personally performed more than fourteen thousand operations. The Princess, his wife, is ten years his junior. She is aunt both to the present German Empress and to Prince Christian, son-in-law of Queen Victoria.—*Med. and Scien. News.*

A Natural Inference.

"Ya-as," said an Indian citizen, whose home lies in the fertile valley of the "Waybosh," "I happened to be in Charleston when the fust earthquake cum."

"What did you do when you felt the trembling?"

"I tuk thirty grains o' quinine, b'gosh."—*Corpuscle.*

TRANSLATIONS.*

Electrical Treatment of Gastric and Intestinal Diseases.†

Beginning with the physiology and the clinical picture of various diseased conditions of the alimentary tract, given by various writers on the subject, the author summarizes as follows:

Paretic conditions of the esophagus and the cardiac orifice (rumination) following disturbances of the central nervous system or consequent upon neurasthenia, require galvano-faradization, that most powerful stimulant of unstriped muscle. Its application is made thus: Connection is made between the opposite poles of a galvanic battery and that of the secondary coil of a faradic machine, the latter of the Dubois type having a sliding induction. The electrode from the other galvanic pole, to be applied to the sternum, should be rather broad, flexible and well insulated up to its circular margin. The flexible cord from the free pole of the secondary (induced) current should end in either a round electrode for percutaneous galvano-faradization, or for intra-esophageal and intra-ventricular application, in a thin, flexible, intra-gastric electrode having a nickeled globular terminal. For the former, ten minutes would be a sufficiently long seance, and for the latter, five minutes; in either case, these can be made on alternate days until improvement is noticed and then every third day will answer. The current should be a weak one at the outset, and should be gradually and very carefully increased, especially in the intra-ventricular application. The latter is of particular value in paresis of the cardiac orifice.

Galvano-therapy is indicated in gastralgia and the so-called gastric neuroses and the percutaneous method is best except when unyielding cases demand the intra-ventricular instrument. For this particular variety the writer advises the removable attachment suggested by Wegele, which consists of a flexible metal spiral easy of insertion into any ordinary rubber gastric sound; it caused no inconvenience whatever in swallowing.‡ The strength of current ranges from ten to thirty mille-amperes and the length of sitting from five to ten minutes.

The nervous vomiting of hysterical subjects, the nausea of pregnancy and the *crises gastriques* of tabetics each call for percutaneous galvanization by large flat electrodes and with considerable strength of current. As a few applications will frequently terminate such attacks of vomiting, it has been employed by Semola to differentiate between that which is reflex and that caused by actual alterations in the gastric mucosa.

Galvanization of the vagus may be tried for so-called nervous pyrosis, and here three to five mille-amperes are applied for from five to ten minutes.

Stubborn gastralgia due to cicatrized ulcer may be successfully relieved by an intra-gastric galvanic current of ten to fifteen mille-amperes.

Mechanical insufficiency, whether due to gastric dilation, to pyloric prolapse or to gastroptosis, is most thoroughly treated by percutaneous and internal faradization which later may be simultaneously combined with massage.

Indigestion from diminished gastric secretion is quickest relieved by intra-gastric faradization. Subacidity is most favorably influenced by faradization and hyperacidity by the galvanic current.

Enteralgia of nervous origin is always improved and generally disappears through systematic stabile and transverse galvanization of the abdomen.

Habitual constipation, due to muscular atony is successfully treated by faradism. Recent modifications include simple galvano-faradization, galvano-faradic massage and, in very sensitive individuals, the galvano-faradic "hand."

In simple galvano-faradization of the abdomen, the electrode belonging to the free pole of the galvanic apparatus is in-

* Translated for MEDICAL AND SURGICAL REPORTER, by A. B. HIRSH, M.D., Philadelphia.

† WEISS, Vienna *Centralblatt fur die gesammte Therapie*, 1896, pp. 521-533.

‡ And should permit of more perfect cleansing than the Emborn and other intragastric electrodes.—TRANS.

serted into the rectum, and that from the primary current attached to the secondary (induction) coil is passed about the umbilical region, and along the colon, the seance lasting ten or fifteen minutes. It is no longer advised to employ the massage-roller, formerly so much esteemed in abdominal massage. The writer describes a new rectal electrode designed to prevent cauterization of the mucous membrane, an accident which may happen in this plan of treatment.

Galvano-faradism is also advised for its successful results in those varieties of bowel atony known as enteroptosis and coloptosis.

For invagination the use of voltaic alternations is recommended by Clemens. A compress of a number of folds is saturated with salt-water and placed over the supposed seat of disturbance, and on the compress rests a flat electrode, several square inches in area. A rectal electrode is inserted and the current permitted to flow for from five to ten minutes.

Incarcerated hernia, finally, is a condition in which an attempt at reduction with the help of galvano-faradization may be made by the attending physician. Here reposition may follow manipulation by the right hand when it is included in the circuit of the double current.

Eucain "B" for Eye Operations.*

Dr. P. Silex (*Therapeutische Monatshefte*, Berlin, June, 1897) says that the reports upon eucain A during the last few months have been favorable. Disadvantageous features have rarely been noticed. Amongst least laudatory reports are those of Vollert, Best and Winterfeld; and they perhaps would not have appeared if these investigators had not used such concentrated solutions of the drug. It is possible also that the purity of the eucain A may not have been above cavil.

Dr. Vinci entered the polyclinic of Geheimrath Professor Schweigger about a year ago, and, with his permission, entered, in conjunction with myself, upon the investigations, which included observations upon eyes affected with the most varied diseases. My independent investigations enabled me to inform him that eucain A was very useful, and fully equal to cocain. A solution that I received from elsewhere later, and which was labeled eucain A, I was compelled to reject, as it caused severe pain in the lids and great reddening of the conjunctiva. I am somewhat at odds with Dr. Vinci as to the explanation of the phenomena observed with him.

The same care and zeal was observed in both sets of cases and the clinical material was not different; and I therefore conclude that the solutions of eucain "A" were not alike, that one of them was perhaps not free from acids or other impurities. Dr. Vinci is certainly right when he reports that the results obtained at the clinic were good ones, and I do not attempt to deny the occurrence of the unpleasant phenomena that appeared after the employment of the solution that we were using later.

For the last two and a half months eucain "B" has been used by Professor Schweigger in eye operations of the most varied kinds, including 49 senile cataracts, and with perfect satisfaction.

The anesthesia was complete, the vascular injection moderate. Corneal opacities did not appear; but it is important not to make the instillation too long before the time of operation. Four drops are sufficient, instilled five minutes before beginning work. Repeated and lengthy instillations of the two per cent. solution that is usually employed cause a considerable injection of the conjunctival vessels, and on section of the conjunctiva, the abnormal hemorrhage may interfere with our sight of the field of operation. It is not yet decided whether the hyperemia exercises any favorable influence upon the healing of the wound. Mellinger attributes to the cocain anemia an unfavorable effect in this respect.

When for any reason it becomes necessary to anesthetize the iris, which cannot be effected by the instillation of either cocain or eucain into the conjunctival sac, a few drops of the eucain solution must be injected into the anterior chamber with a broad-mouthed pipette after the corneal section has been made. In two minutes at the latest thereafter the iris is anesthetic; a fact of which I have fully convinced myself by experimentation upon two rabbits, as well as in the case of one man affected with cataract. I have nothing

* Translated for MEDICAL AND SURGICAL REPORTER.

new to report upon the other ocular phenomena occasioned by eucain "B." In squint operations its action was really marvelous, and in this field cocain is not to be compared with it.

Genius and Food.

Rossini never ate any breakfast, and frivolous critics say this is why he never wrote serious music. At a banquet given by Napoleon III. Rossini ate twice of the Italian spaghetti and demolished his portions with gusto.

Wagner was a highly practical feeder, ate very fast, placing his food in his mouth and gulping it down while he talked.

Napoleon III. had a "porcine" side to his nature. He was rather a glutton and the pictorial promiscuity of his salon quite horrified English visitors who enjoyed his hospitality.

Zola would not take honors as a gourmet. He employs a good cook, but eats sparingly himself and is careful as to wines. His dinners are daintily served.

Charles Reade could not be induced to taste mackerel. He shirked beef, never tasted soup, beer and fatty dishes. He was fond of mutton and baked apples. He hated to get into evening dress for dinner.

An Opportunity to Win Fame.

Now that pregnancy is known to be a germ disease, it seems strange that some investigator has not discovered an antitoxin which will immunize against conception for a longer or shorter time. I feel perfectly justified, from general observation, in asserting that such a discovery properly placed before the public would make the discoverer rich beyond all avarice.—MILLS, in *North American Journal of Homeopathy.*

The New Woman and the Wheel.

A writer in a St. Louis contemporary says that the bicycle "is equally if not more beneficial to young girls with scanty, delayed or irregular menstruation, who are developing into manhood, than any other deviation from the normal that the female sex is afflicted with." The opponents of the wheel contend that this is just the trouble: that girl riders do develop into manhood.—*Medical Record.*

Straining at a Gnat and Swallowing a Camel.

We feel that is right to prevent cruelty to animals, but our humane societies should not go into hysterics over the vivisection of a worthless cur for the advancement of science, and wink at the cruelty that is being inflicted on their fellowmen who must bow to the shrine of fashion or kneel to the tyranny of custom. Attention should be directed to an exercise of cruelty to men who are employed as carriage drivers, and in sultry weather are literally roasted in their double-breasted great-coat and silk-hat uniforms. These men receive little sympathy from the public, or even from that boiled-down quintessence of emotional sanctification found to exist twenty-four hours every day in the palpitating bosoms of the Humane Society officials. These men swelter and sweat, but take their condition as a pure matter of course, regarding the subject as a foreordained way of earning their daily bread.

The uniformed police also are obliged to wear close-buttoned-up cloth uniforms which are sure enough sweaters, in which they steam, fume, broil and sizzle, until such heat processes are engendered as to recently cause an unusual number of prostrations of great, strong, hearty men who constitute the police force of Cincinnati. There is no good reason for such inhuman treatment. It would be easy enough to adopt a very light-weight flannel goods for summer wear, which, when made up, would constitute very presentable uniforms for the city guardians during the four months of warm weather. Railway employees also have a uniform that includes a vest which, as a confiner of animal heat, is unexcelled. It is well that men engaged in special occupations such as the police and those in charge of the railway passenger service should be suitably uniformed, but there should be made an adaptation to physical and thermal conditions that will afford some relief, and not produce an actual physical suffering where it is uncalled for.—*Cincinnati Lancet Clinic.*

Doctor—"You have only a few minutes to live. Have you any last wish?"

Patient—"Yes, I wish I had engaged another doctor."—*New York Tribune.*

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PHILADELPHIA, SATURDAY, AUGUST 7, 1897.

EDITORIAL.

EXPLORATORY OPERATIONS.

An operation begun for the removal of disease organs and ending in failure to remove the pathologic conditions found should not under any circumstances be termed an exploratory operation. It should have applied to it the new term "inoperable," or should be designated according to the vernacular a "flunk."

An exploratory operation is one where an opening is made simply to make a diagnosis. If adhesions found are broken or the parts disturbed in the least it is an attempt at removal of the conditions. Hence it should not be reported, as is so often done in our hospital reports, under the head of exploratory operations, and the mortality should be nothing.

The term "exploratory" should be discarded for the reason that no surgeon should attempt an operation for any condition without sufficient reason to feel that he can accomplish some good in so doing. An operation begun should always be for a definite purpose and nothing should prevent the operator from finishing the operation save the immediate death of the patient on the table. Partial or abandoned operations are almost invariably fatal in a very short time, and they greatly complicate the conditions found and increase and prolong the suffering of the patient.

These facts are confirmed by the reported experiences of all our best surgeons. An operation once begun by a competent operator can and should be finished, and only the competent should attempt the work. The mortality in exploratory operations as evidenced by the statistics of our hospitals is accompanied by a higher rate than is chargeable in any of the recognized legitimate operations in abdominal surgery where the operations are skilfully done and completed.

In the earlier days of abdominal surgery, when the pioneers were groping more or less in the dark and had not settled methods or precedents to follow, there was some excuse for exploratory opera-

tions. With our present knowledge there exists little necessity for them. Experience has given a mastery in determining conditions without inflicting exploratory wounds.

True, not all nor probably the worst may be determined, but sufficient can be known to justify operation for actual disease. If the operation is painstaking and surgically thorough all unexpected complications will be dealt with. The great amount of work which has been done clearly demonstrates how much can be safely removed for the patient's cure or relief. The risk in nearly all cases can be very closely approximated and the patient can be very nearly informed as to the danger involved.

To be sure, the man who has had little or no experience or special training in abdominal surgery will continue to open the abdomen, look in, wriggle and squirm his fingers around, and conclude the patient has had sufficient of his surgical wisdom and skill for his money, and quit. Doubtless there is often more wisdom in the quitting than in the beginning.

Ventral fixation gets as near an exploratory operation as anything legitimately practiced at the present time, and has less to recommend than any of the exploratory procedures.

THE SPECIFIC ACTION OF QUININE IN MALARIA.

Dr. E. C. Register, Editor of the *Charlotte Medical Journal*, read a paper with this title before the North Carolina Medical Society.

After many years of study, both clinical and microscopical, the Doctor arrives at the following conclusion in reference to the specific action of quinine in the continued forms of malarial fever. He says a malarial fever without complications will subside after the plasmodia of malaria disappears from the blood; that we have in quinine the means to completely eradicate malarial poison from the body; that malarial fever occurring in a previously healthy subject, and in the central United States, if at once recognized and properly treated, never ends in death; that it is speedily curable, never continues, provided the nature of the disease be recognized and appropriate treatment employed.

Dr. Register has made microscopical examinations of the blood of several hundred patients suffering with remittent malarial fever, and has studied closely and thoroughly the crescentic and ring-shaped bodies which he says are the forms of the parasite which is responsible for the continued types of this fever, and he finds that the reason quinine does not always effect these irregular forms of the poison, is on account of the usual defects in its administration. He contends that the drug is very imperfectly absorbed when given by the stomach, and when the patient has a temperature of over 102 degrees.

He says that in cases of continued malarial fever, if distinct and well-marked intermissions of the fever are produced artificially by the use of antipyrine, antifebrine and phenacetine, the crescentic and ring-shaped bodies will disappear after the administration of quinine, as quickly as the spherical bodies that are found in an ordinary case of intermittent fever. In reference to the belief that the forms of the parasite that inhabit the blood cells are not acted on by quinine, he says: "There is no doubt in my mind that this belief is not erroneous. Besides my own observations, I have been able to collect the opinions of thirty-two authors touching upon this point, and twenty-eight out of the thirty-two believe that the endoglobular or intra-corpuscular forms are not, on this account, the cause of an uncontrollable fever, and that its proximity to the blood cells does not, in any way, protect it from the action of quinine."—*St. Louis Medical Era.*

CORRESPONDENCE.

CONGENITAL TEETH.

EDITOR OF THE REPORTER:—The following case was presented by me to the Cincinnati Obstetric Society: Called February 22, 1896, to Mrs. L. IIpara in labor at eighth month of gestation. Twins, both male, were soon delivered, the first presenting a vertex and the second a shoulder, necessitating turning. One was immediately observed to have two inferior incisor teeth presenting, both children being small and poorly developed. The mother was a very small woman.

The teeth were both very loose and in continual danger of dropping out. One disappeared at the tenth week, probably being swallowed. The other remained *in situ* until the death of the child, which occurred at the twelfth week. It died in convulsions away from home, and the physician who was sent for ascribed the cause of death to meningitis. Premature labor in this case, as that of Crausius, occurred at the sixth month. Helwig at the seventh, and also that of Lann, which is reported as occurring prematurely. The extraction of teeth in the mother during pregnancy was reported by Flesh. In the writer's case two teeth were extracted during the third month. The tooth remaining at the time of the child's death was removed and was exhibited by the writer to the Cincinnati Academy of Medicine. None of the gentlemen present at either of these societies had ever seen a case of this kind. The child was shown soon after birth to about 100 students in the Medical College of Ohio and a number of medical men.

These cases serve as a curiosity for doctors and students, and are a sight many do not behold in a lifetime. Some writers claim the possibility of no milk teeth appearing to fill the vacancy left by exfoliation or removal.

The important writers on this subject are Jacobi, Forcheimer, Pliny, Bartholin, Magitot, Schuerig, Ballyntyne, Pierce, Vargas, Buist and Mackenzie.

Congenital teeth are very rare. Paris Maternity reports from 1856 to 1863 out of 17,573 births only 3 cases of congenital teeth, or about one in 6,000. Ballantyne in the Edinburg *Medical Journal*, May, 1876, reports 70 cases gleaned from the literature.

Dr. C. C. Surber, of Independence, Kansas, writes me that six years ago he delivered a lady of a fine boy, who had two central inferior incisor teeth, one-eighth inch long, very sharp, but loose. He removed them at four weeks because of the cutting of the upper gums. He has not seen the child since it was four years old, but the incisors had not then made their appearance.

Dr. George W. McCoy, of Columbus, Ind., reports to me by letter that December 27, 1874, he delivered Mrs. M. of a male child natural in every respect except in the possession of two teeth in the upper gums, one full length and size of temporary teeth, the other small and about half through the gums. Both teeth were exfoliated about the fifth week. The child is a hearty and strong man.

This freak of nature has been noticed at wide intervals and with great rarity for a long time. Shakespeare has frequent references to it. In "Richard III." the Duchess of York says: "Marry! my uncle grew so fast that he could gnaw a crust at two hours old. 'Twas two full years ere I could get a tooth."

Queen Margaret: "That dog that had his teeth before his eyes."

King Henry VI.: "Teeth hadst thou in thy head when thou wast born to signify that thou camest to bite the world."

Richard: "For I have often heard my mother say I came into the world with my legs forward. The midwife wondered and the women cried: 'O Jesus save us, he is born with teeth!' And so I was, which plainly signified that I should snarl and bite and play the dog."

In English and French history we have

mention of Richard III., Louis XIV., Richelieu, Mirabeau and Mazarin. Inheritance is shown in some cases. In the instance of Mattei the infant's mother had been born with a tooth, and in Limerick's the mother had two congenital teeth, as did also her second child and a child of her sister.

The etiology of the premature eruption of the teeth is considered due to some abnormal development of the bone; probably most cases have some connection with rickets. In some children who cut their teeth young, the fontanelles close early, but not so in those cases where the teeth are congenital. The enamel is usually very thin or absent. The etiology of congenital teeth is in some instances described as the premature occurrence of the processes which normally lead to the cutting of the milk teeth. In a few cases it is probably due to a true ectropia of the dental follicles and its tooth. Such premature eruptions are usually found in children suffering from improper nutrition or other abnormal systemic conditions.

Treatment: A tooth dangling uselessly and aimlessly in the mouth should unquestionably be removed; otherwise inaction is preferable. The teeth are sometimes so situated as to prevent closure of the mouth, or to make nursing painful and futile and endanger the nourishment or life of the child. The danger of hemorrhage is probably magnified by Magitot. Having lost one child in which the hemorrhage recurred on four separate occasions and proved fatal despite all treatment, he lays down the rule to never extract the teeth. If the child is puny and delicate, perhaps syphilitic, hemorrhages are possible.

E. S. McKee, M. D.
Cincinnati, O., June 20, 1897.

A SATISFACTORY METHOD FOR THE TREATMENT OF BOILS.

Editor of The Reporter: It is now pretty generally conceded that boils are of microbic origin, the microbe being in all probability the staphlococcus pyogenes aurens or the mycelium. If this theory be accepted and the lesion treated antiseptically, it would be an easy matter to bring about resolution of the part.

If seen when forming the boil may be aborted by painting a ring of iodin around it, and if a hair occupies the center, plucking it out. When the boil has fully formed (whether the core be present or not) a crossed incision will quickly heal it. If necessary the parts should be shaved, then cleansed as for any operation, first with soap and water, alcohol and lastly mercuric bichlorid 1-1000, then anesthetize by spraying with ethyl chlorid.

The instruments being aseptic a crucial incision is made through the center of the boil, beginning well to one side, and carried to the other, going as deep as the cellular tissue. The boil should then be gently pressed to expel as much pus as possible and to allow a free flow of blood. After a sufficient quantity of blood has escaped the wound is wiped out with pure carbolic acid, then dressed with icthyol ointment 50 per cent. and powdered boric acid. It is remarkable how much relief will be experienced even five minutes after this procedure.

The next day the swelling will have for the most part subsided and pain and tenderness will have almost entirely disappeared. Resolution will now take place rapidly, the patient suffering no inconvenience. If the boils have a tendency to come out in crops the internal administration of mercuric bichlorid in full doses will arrest their growth.

Ross H. Skillern,
Univ. of Penna.

Philadelphia, July 27, 1897.

In poisoning by fungi, such as poisonous mushrooms, give zinc sulphate, or use stomach pump. After emesis give castor oil. Hypodermatically use atropin and stimulants.

In poisoning with aconite, use a strong emetic of zinc sulphate, and stomach pump. Give hypodermatically strychnin, digitalin, atropin and whiskey. Use amyl nitrite by inhalation.

ABSTRACTS.

STUDY OF THE AMERICAN MEDICINAL FLORA.

The sub-commission of the Pan-American Medical Congress appointed to study the medicinal plants of the United States has entered into an association with the Smithsonian Institution for that purpose. Attention is called to the respective circulars of these organizations.

The circular by the Smithsonian Institution states that it has undertaken to bring together all possible material bearing on the medicinal uses of plants in the United States. Arrangements have been made with a body representing the Pan-American Medical Congress, the Sub-Commission on Medicinal Flora of the United States, to elaborate a report on this subject, and the material when received will be turned over to them for investigation.

All packages and correspondence should be addressed to the Smithsonian Institution, Washington, D. C., and marked on the outside "Medicinal Plants, for the United States National Museum." Franks which will carry specimens, when of suitable size, together with descriptions and notes, free of postage through the mails, will be forwarded upon application. Should an object be too large for transmission by mail, the sender is requested, before shipping it, to notify the Institution, in order that a proper authorization for its shipment may be made out.

The subcommission for the United States consists of Dr. Valery Havard, U. S. A., Chairman; Frederick V. Coville, Botanist of the U. S. Department of Agriculture; Dr. C. F. Millspaugh, Curator of the Botanical Department of the Field Columbian Museum, Chicago; Dr. Charles Mohr, State Botanist of Alabama; Dr. W. P. Wilson, Director of the Philadelphia Commercial Museums; and Prof. H. H. Rusby, of the New York College of Pharmacy. This Sub-Commission solicits information concerning the medicinal plants of the United States from every one in a position to accord it. The principal points of study are as follows:

1. Local names.
2. Local uses, together with historical facts.
3. Geographical distribution and degree of abundance in the wild state.
4. Is the plant collected for market, and if so,
   (a) At what season of the year?
   (b) To how great an extent?
   (c) How prepared for market?
   (d) What is the effect of such collection upon the wild supply?
   (e) What price does it bring?
   (f) Is the industry profitable?
5. Is the plant, or has it ever been, cultivated, and if so, give all information on the subject, particularly as to whether such supplies are of superior quality, and whether the industry has proved profitable.
6. If not cultivated, present facts concerning the life history of the plant which might aid in determining methods of cultivation.
7. Is the drug subjected to substitution or adulteration, and if so, give information as to the plants used for this purpose.

While it is not expected that many persons will be able to contribute information on all these points concerning any plant, it is hoped that a large number of persons will be willing to communicate such partial knowledge as they possess.

It is not the important or standard drugs alone concerning which information is sought. The Sub-Commission desires to compile a complete list of the plants which have been used medicinally, however trivial such use may be. It also desires to collect all obtainable information, historical, scientific and economic, concerning our native and naturalized plants of this class, and, to that end, invites the co-operation of all persons interested. Poisonous plants of all kinds come within the scope of the inquiry, whether producing dangerous symptoms in man, or simply skin inflammation, or, as "loco-weeds," de-

leterious to horses, cattle and sheep. In this respect, the general reputation of a plant is not so much desired as the particulars of cases of poisoning actually seen, or heard from reliable observers. It is believed that much interesting knowledge can be obtained from Indians, Mexicans and half-breeds, and that, consequently, Indian agencies and reservations are particularly favorable fields for this investigation. Such knowledge will be most acceptable when based upon known facts or experiments.

In order to assist in the study of the habits, properties and uses of medicinal plants, the Sub-Commission undertakes to furnish the name of any plant-specimen received, together with any desired information available.

Owing to the diversity in the common names of many plants it will be necessary for reports, when not furnished by botanists or others qualified to state the botanical names with certainty, to accompany the same with some specimen of the plant sufficient for its identification. While the Sub-Commission will endeavor to determine the plant from any portion of it which may be sent, it should be appreciated that the labor of identification is very greatly decreased, and its usefulness increased, by the possession of complete material, that is, leaf, flower and fruit, and in the case of small plants, the underground portion also. It is best to dry such specimens thoroughly, in a flat condition under pressure, before mailing. While any convenient means for accomplishing this result may be employed, the following procedure is recommended. Secure a flowering or fruiting branch, as the case may be, which when pressed shall not exceed 16 inches in length by 10 inches in width. If the plant be an herb 2 or 3 feet high, it may be doubled to bring it within these measurements. If it possess root leaves, some of these should be included. Lay the specimen flat in a fold of newspaper and place this in a pile of newspapers, carpet felting, or some other form of paper which readily absorbs moisture, and place the pile in a dry place under a pressure of about 20 to 30 pounds, sufficient to keep the leaves from wrinkling as they dry. If a number of specimens are pressed at the same time, each is to be separated from the others by three or four folded newspapers or an equivalent in other kinds of paper. In 12 to 24 hours these papers will be found saturated with the absorbed moisture and the fold containing the specimen should be transferred to dry ones. This change should be repeated for from two to five days, according to the state of the weather, the place where the drying is done, the fleshiness of the specimens, etc. The best way to secure the required pressure is by means of a pair of strong straps, though weights will do. The best place for drying is beside a hot kitchen range. When dry the specimens should be mailed between cardboards or some other light but stiff materials which will not bend in transit.

It is a most important matter that the name and address of the sender should be attached to the package and that the specimens, if more than one, should be numbered, the sender retaining also specimens bearing the same number, to facilitate any correspondence which may follow. The Sub-Commission requests that, so far as practicable, all plants sent be represented by at least four specimens.

COD-LIVER OIL IN TUBERCULOSIS.

Dr. Arrowsmith, of Brooklyn, is the author of a bright little pamphlet on the modern aspects of tuberculosis, in the course of which he pays his respects to the hypophosphites and to cod-liver oil. As to the latter, he says that cod-liver oil has been administered, as a matter of routine in larger quantities than any other remedy. His personal experience has led him to the opinion that it is very much worse than useless. The most that he has ever felt justified in hoping from it has been that it would not do harm. He has never seen it act beneficially. Patients who improve during its administration do very much better, as a rule, after discontinuing its use. "It disturbs digestion and prevents the utilization of other and more valuable forms of food stuffs."—*Journ. Am. Med. Assoc.*

INTESTINAL OBSTRUCTION FROM PARALYSIS OF THE BOWELS TREATED BY LAPAROTOMY, WITH RECOVERY.*

The following case illustrates the benefit to be derived from operative interference though performed under adverse circumstances. While advocating conservatism in using the knife, there are times when all other methods having failed it is the only alternative. There is everything to gain and nothing to lose.

May 10, 1896, Mrs. S., aged 63 years, called, seeking relief from what had been termed by her family physician indigestion. Patient had been ailing for two years, marked with frequent exacerbations, and as each succeeding attack increased in severity, her family, becoming alarmed, sought further advice. She was greatly emaciated, no appetite, bowels constipated and tympanitic, tongue furred, et cetera, suggesting that a proper diagnosis had been made. I did not give the case close attention, but prescribed for the torpid condition of the secretion (that apparently being the chief feature of her distress) and she returned home.

The following Tuesday I called and found her in bed. The bowels were obstinately constipated, not having moved for several days, as the prescription previously given had not produced the desired effect. Temperature was normal, pulse accelerated, tympanitis increased, pain referred to the left hypochondriac region, nausea with frequent attacks of vomiting, semi-stercoraceous in character, extreme thirst, clearly indicating obstruction of the bowels. After pursuing the usual routine practice, including copious enemas of various combinations oft repeated, massage thoroughly and persistently applied, all with negative results, and as the patient was becoming perceptibly weaker, I decided, after consulting and obtaining permission of the lady and her family, to open the abdomen and ascertain the nature of the obstruction, and if possible relieve it. Accordingly on the 21st I operated. With as nearly aseptic surroundings as was possible, the abdomen was opened through the median line and the intestines exposed.

Visual inspection revealed an appalling condition. The intestinal circulation was practically *nil*—being retarded apparently by the overdistension, which reacting upon the mesentery produced a congestion of this structure, thus rendering the case much graver and the probabilities of relief more uncertain, as the vitality of the tissues involved was at a very low ebb, in fact approaching dissolution. The gaseous accumulation was removed by puncturing the intestinal walls at several points by means of a medium-sized hypodermic needle and the flatus entirely overcome. There was found a paralysis of a large portion of the intestinal tract, but no localized obstruction, no portion being even attenuated.

As the circulation did not return on relieving the distension, I resorted to *direct massage.* The bowels being protected with towels wrung from a warm saline solution, every portion of them was subjected to pressure. By means of the thumb and fingers they were compressed and relaxed alternately and repeatedly, with the effect of restoring the circulation and thus relieving the rigidity of the mesentery. This was followed by douching the abdominal cavity thoroughly with a warm Thiersch's solution, a portion of which was retained, and the intestines returned to their home. The peritoneum was approximated and retained in apposition by an interrupted suture of sterilized catgut (cut short), the remaining coverings being stitched as one, and the toilet completed. No drainage. Dry dressing applied.

Patient rallied from the operation with no alarming symptoms, and at the expiration of 48 hours her temperature fell to normal, and at no time was it above 100° Fahrenheit. The wound healed by first intention, and *not a drop of pus was visible at any time.* The external sutures were removed on the eighth day. The twelfth day after operation patient expressed herself as having a more natural feeling in the primae viae, a pressure in the lower bowel, a call from nature, but alas, the desire could not be gratified. Inserting my finger in the rectum I found an

* ROBERT R. LAWRENCE, M.D., in *The Physician and Surgeon.*

impacted mass of fecal matter of about the appearance and consistence of blue clay, which upon removal was followed by repeated and copious evacuations, in the aggregate enormous.

From this time she made an uninterrupted recovery. Her appetite returned, and digestion and assimilation were good, the bowels recovered their normal tone (in a measure) and moved regularly. She is now gaining in flesh, oversees her household affairs, and feels that life is again worth living, a comfort to her friends, and a living witness to the science of surgery.

Possibly sooner or later the trouble may return, but there has been a respite, and I shall endeavor to obviate a recurrent attack by stimulating intestinal peristalsis and preserving the tonicity of their muscular structure.

WATER FILTRATION.*

The purification of the contaminated water supplies of many European towns and villages has long been effected by passing the water slowly through large beds of sand; and though the results attained were extremely satisfactory, both from a hygienic and an esthetic standpoint, the manner in which the impurities were removed was but slightly understood until the comparatively recent investigations of Koch, Pasteur, and others finally demonstrated that the high efficiency of some of these filters was due mainly to at least three vegetable organisms which infested them. Two of these were found to be very similar to the nitrifying organism that exists in the soil and so ably converts the fertilizers to a form in which the plants can assimilate them. The third surrounds each grain of sand in the surface of the filter bed with a coating of gelatinous nature, which so effectually fills the spaces between the grains of sand that the most minute particles are able to enter the filter but a slight distance indeed.

While the mechanical or straining office of the filter is greatly promoted by this last mentioned growth, the destruction of the dissolved organic matter, or food of the disease-producing germs, is an equally important feature and a far more complex process. Dead organic matter, whether animal or vegetable, goes through the successive stages of decay (in itself a bacterial process, the deadly ptoamines being sometimes formed) until it has reached the stages known as "albuminoid" and "free" ammonia, the first representing the organic matter on which the bacteria of decay are still working and the second the complete process. The dissolved organic matter in the water of uncovered reservoirs usually exists in both these forms, and its reduction to harmless inorganic salts is the duty of the filter.

The nitrifying organism that infests filter bed extracts the ammonia from the water in its passage through the sand and converts it into nitrous acid. This product combines with the lime that exists in all natural waters, forming nitrites. These nitrites are again attacked by another similar organism and nitric acid is the result, which, again combined with the base, forms nitrates or the inorganic salts of nitrogen. It frequently happens that even this last product undergoes some obscure change and is entirely eliminated from the water. This, however, is not sought after, as it requires a reversal of the conditions necessary for the support of the nitrifying organism, and as the nitrates have no hygienic significance, the process is considered as having progressed sufficiently far.

In practice the unfiltered water is maintained on the surface of the sand at a depth of from two and one-half to six feet. The bacteria that exists in the water together with the suspended impurities being unable to enter the sand, on account of gelatinous growth, form a film or slime on the surface of the filter that materially aids in the straining process, by retaining over ninety per cent. of the suspended matter in the water that subsequently follows. After entering the sand, the water comes in contact with the nitrifying organism, which converts the dissolved organic matter into harmless in-

* CHURCHILL HUNGERFORD, C.E., in *Scientific American.*

organic salts and destroys any bacteria that may have penetrated the surface. The water is drawn from the bottom of the filter clear, bright, and sparkling, and practically free from bacteria.

In time the film of impurities on the surface of the sand becomes so thick that not enough water can pass through it to meet the demand, and the filters then require cleaning. This is effected by scraping the film or "blanket," as it is called, from the surface of the filter bed, care being taken to remove as little of the sand as possible; for, thanks to the gelatinous organism, the suspended impurities have been unable to penetrate the surface. The filter is then in condition to run for another period of time, ranging, under the varying conditions, from two weeks to four months. Cleaning costs from fifty cents to one dollar per thousand square feet of filtering surface. The average cost of filtering one million gallons of water in six American filter beds is about one dollar.

In water containing from 10,000 to 50,000 bacteria per cubic centimeter (about 15 drops), these filters commonly remove all but 50 or 75 and frequently all the bacteria. G.W. Fuller, biologist of the Massachusetts State Board of Health, says of the Lawrence filters: "Out of 102 analyses, 58 indicated that the filtered water was absolutely sterile." An experience of the writer at the Lambertville, N. J., filter beds, showed the influence of the gelatinous growth in removing the suspended matter. When the filters were first put in operation the turbid water showed only a very slight change after passing through them. So soon, however, as this growth had taken place the water ran from the filters clear and odorless.

All properly constructed filter beds improve with age instead of deteriorating, but it is essential that they be so constructed that all the conditions necessary for the inception and growth of the nitrifying organism are rigidly adhered to, as otherwise undesirable bacteria will infest the beds and make the water far worse after than before filtration. The bacteria grow through the bed after the manner of mildew through a bolt of linen. A properly constructed filter bed can be compared to a well cultivated garden, in which the weeds are destroyed and the plants flourish, and a poorly constructed filter to a neglected garden, in which the weeds outgrow and dwarf all other vegetation.

The popular idea regards all bacteria as disease producing microbes. The bacteria are really a microscopic growth of the lowest order of vegetable life and many of them are essential to our existence. Some, however, are deadly, as the typhoid, cholera, and bubonic plague germ; some produce diarrohea, and others impart a very objectionable taste to water or fill the pipes with their growth. Any or all of these that may exist in the water are efficiently removed by the filter, and the immediate reduction of water-borne diseases is testified to by all communities where this method has been adopted.

THE TREATMENT OF CATARRHAL DISEASES WITH GUAIACOL CARBONATE.*

In his article on "The Creosote Treatment in Childhood,'" (Wiener, Medizin, Blatter, 1896, No. 49), Dr. Hock emphasizes the value of creasotal, not only in cases of pronounced pulmonary disease, "but also in the treatment of the catarrhs that are so frequently left behind by whooping cough and measles, and which are well known as the prodromata or predisposing causes of tubercular infection. Treatment with the ordinary expectorants as is usually recommended, is here entirely useless. Besides the hydriatic treatment, it is only from that with creosote that we may expect favorable results." Creosotal is especially useful in the treatment of these cases, and Dr. Hock is in the habit of employing the following formula:

"Creosotal..3-5.0 (¾ to 1¼ drachms)
Ol. Morrhuae....100.0 (3 1-3 ozs.)
Saccharini.....0.05 (¾ grain)

To older children who do not want to take cod liver oil, the creosotal was

* Dr. Nied, Physician in Chief of St. Elizabeth's Hospital, Vienna, *Allgemeine Wiener Medizinische Zeitung*, June 1, 1897.

given in alcoholic solution and in drops, or emulsified by drops in sugar water."

"The dosage in children less than one year old was 0.15 (2¼ grains), gradually increasing to 0.5 (7½ grains), or from a teaspoonful of 3 per cent. Creosotal-cod-liver-oil to two teaspoonfuls of a 5 per cent. solution. Older children took from 0.5 (7½ grains) to 1.5 (22½ grains) daily."

The great prevalence of catarrhal troubles during the last winter gave me an excellent opportunity to experiment upon adultsw ith guaiacol carbonate, which has an action analogous to that of creosote carbonate.

As is well known, guaiacol is the chief constituent of creosote. The value of a specimen of creosote depends upon the amount of guaiacol that it contains. Creosotal is a creosote that, by reason of its combination with carbonic acid, is transformed into a neutral, non-poisonous, non-caustic body, without the loss of any of its therapeutic properties. Guaiacol carbonate is guaiacol combined with carbonic acid in the same way.

In the period extending from January 17 to February 12, I treated 12 female patients, of ages between 23 and 75 years, who were suffering from acute bronchitis, complicated in some cases with influenza, with guaiacol carbonate. In accordance with the severity of the attack the following doses were employed:

First day, mornings and evenings, 0.5 gm. (7½ grains of guaiacol carbonate; second and succeeding days, 1 gm. (15 grains) twice, daily. Or first and second days, mornings and evenings, 1 gm. (15 grains); third and succeeding days, 1, 5 gm. (22½ grains) twice, daily. Or first day, 1 gm. (15 grains) twice; second day, 1, 5 gm. (22½ grains) twice; third and succeeding days, 2 gm. (30 grains) twice a day.

The effect of the remedy was usually apparent upon the second day, and latest upon the fourth, it showed itself by a reappearance of the appetite and a loosening of the mucus in the tubes. The expectoration ceased in from 14 to 20 days. In from two to three weeks the patients were discharged cured. The following histories will illustrate my assertions:

Katharina Oetl, 67 years old, fell sick January 17, with acute bronchitis. On the first day the patient was given, morning and evening, 0.5 gm (7½ grains) of guaiacol carbonate on the second day 1 gm., (15 grains), and on the third day 1.5 gm. (22½ grains). Increase of appetite and expectoration soon set in, and on February 3, she was discharged cured.

Theresa Crisch, 26 years old, suffering from acute bronchitis, which begun January 18. For the first three days she was given 1.0 gm. (15 grains), night and morning; on the following days, 1.5 gm. (22½ grains) twice a day. On the second day of the treatment an increase of the appetite was noted, the expectoration, which was at first very slight, became greatly increased by the fourth day, so that by February 7, she could be discharged cured.

Maria Stoiber, 23 years old, was attacked January 19, with an acute bronchitis (influenza). On the first day she received 1 gm. (15 grains), on the second day, 1.5 gm. (22½ grains), and on the remaining days 2 gm. (30 grains) of the guaiacol carbonate. The appetite began to reappear upon the third day only, but it rapidly improved; the mucus secretion was large from the very beginning of the treatment. February 10 she was discharged cured.

Besides these, I treated six nuns, two of whom were aged, respectively, 79 and 81 years, for acute bronchitis. I gave them 1 gm. (15 grains) of guaiacol carbonate, twice, daily, for three weeks. Appetite and expectoration reappeared upon the third day, and all the patients got well.

According to the Business Address Company, of New York, there are 115,377 physicians in America, of whom 3,403 are in California.

Chicago now requires ice used there to be inspected.

A bill has been introduced into the Michigan Legislature providing for the castration of all inmates of the Home of the Feeble Minded and Epileptic before their discharge; of all persons convicted of felony for the third time, and of those convicted of rape.

SOME UNKNOWN PHENOMENA IN INTOXICATION.*

Acute alcoholic intoxication is always marked by a general palsy of the senses and reason. At the first, delusional egotism, with deliriums of suspicion and credulity, and general confusion of thought are present: then an increasing confusion and mental enfeeblement, also a general lowering of all emotional and functional activities. The reasoning is obscure and deranged, certain ideas may fill the mind to the exclusion of all others, together with mental instability of thought, such as changing suddenly from one topic to another. In all cases degrees of dementia, with profound and progressive palsy, are the marked symptoms. These are son prominent and common that no one doubts the insanity and imbecility of an intoxicated person. In a certain number of cases in this condition there has been noticed sane moments and intelligent reasonings, with clearness of judgment and perception, equal, if not superior, to the highest brain activity in its normal state—in a semi-comatose state the mind will suddenly display a degree of wisdom and sanity in some opinion or advice, then sink back into its demented condition. Usually these sane thoughts refer to his present condition, as in the following:

A man profoundly intoxicated, while being taken to the station house, said to the officer: "I was overcome with the heat and drank some whiskey; my brain has given way. Take me to the hospital." He was found dead in the station cell next morning. His statement was true.

These sane moments sometimes concern the acts and motives of others, as in the following:

A man in a pronounced alcoholic delirium said: "I have willed my property to a banker to avoid arrest for using trust funds. I have returned all the money, but he has refused to give up the deeds. He has been urging me to drink on every occasion and wishes to destroy me." He recovered, and this was found to be true, but he never referred to it when restored.

An inebriate in a comatose condition suddenly begged his mother in St. Louis be written to, but when he recovered he had no memory of this. The letter to his mother was the first news she had had from him for two years.

A stupid comatose inebriate, son of a business man, when his father complained of financial stringency, suddenly said: "Discharge my brother and put a stranger in his place and times will be better." The father did this, and wrote that he found and stopped a serious defalcation. The inebriate son did not remember this remark and could not understand why he made it.

These cases show that certain ideas are formed and expressed unconsciously, leaving no impress on the memory, and appear in the stupor and palsy of intoxication. Probably some special exciting cause brings them to the surface as flashes of reason and conceptions of truth, then all is a blank again. Of course these incidents are not common to all intoxicated men, but exceptional. Occurring as they do in the extreme palsy from spirits, they suggest the operation of consciousness below the senses, and behind the phenomena of ordinary brain activity. The shrewd remarks and wise advice of intoxicated men at times are out of harmony with their present or past actions in the same condition. These sane moments are marked in some cases who, when clearly intoxicated, seem to have flashes of wisdom unusual at other times.

The remark so often made by the laity that states of intoxication in certain men are followed by greater wisdom and judgment than ever manifested during their sober periods is a recognition of this condition. The theory of double consciousness applies and explains much of this phenomena. The ordinary consciousness is palsied by spirits, and can act only along automatic lines. The sub-consciousness or subliminal sense breaks through this palsy and asserts itself in wise comments or statements of events, predictions and sane thoughts. It is certain these manifestations come from deeper and less impaired mentality, and are not mere accidents and morbid impulses of the moment.

The gathering and grouping of a number of well-authenticated incidents of this class may bring out some laws and conditions which control these at present very obscure phenomena.

* *Quarterly Journal of Inebriety.*

THE USES AND LIMITATIONS OF CONDENSED MILK AS AN INFANT FOOD.*

If condensed milk is an improper food for infants, is it so irreparably bad that it cannot be changed or fortified so as to render it a desirable food? We would say that it cannot be made a desirable food; it may be made permissible. In many cases it is the only available food, and in some cases the most desirable that can be obtained. While granting this, we do not in the slightest degree advise its use when a better food can be secured. It is certainly a fact that the practitioner is sometimes obliged to use it. This occasionally occurs through obstinate persistency on the part of the parents, but more commonly among the extreme poor, who cannot afford a more expensive food.

As the chief objections to condensed milk as an infant food are its deficiency in fat and proteids, two changes must be made to render it suitable for use: fat and proteid must be added. As the absence of fat is the greater defect of the two, it must receive chief attention. This deficiency may be corrected by the addition of cream —an impossiblity among the very poor. If cream is not available we may resort to cod-liver oil. It is an excellent substitute and must be regarded as a food rather than a medicine, and must be given continuously, although the daily amount need not be large. The device of using a meat broth for securing the proteid is an excellent one. As an occasional substitute for the broth, egg albumen may be utilized to supply the necessary nitrogen. The white of an egg may be thoroughly beaten up with the water with which the condensed milk is diluted. The chief objection to this plan is the difficulty of determining the proportions to be employed.

By thus modifying condensed milk a child may frequently be carried with fair success to the ninth month. His chances, however, of reaching that age without rickets will be far better with fresh cow's milk.

One advantage, it must be acknowledged, in the use of condensed milk is the fact that the child is less liable to be fed with an all over strong mixture than when fresh milk is used. One of the most frequent and serious errors in infant feeding is over feeding. The fact that children do no worse on these excessively weak condensed milk mixtures is but one of many proofs that they commonly receive more food than they require. If the doctor who is wedded to the exclusive use of condensed milk would not make his fresh milk mixtures four to six times as strong as his condensed milk mixture he would be much better satisfied with fresh milk.

In deciding upon the value of a given food, the physician should not fix his attention upon the present so closely as to entirely forget the future. He should consider the remote as well as the immediate effects of the diet. His office is not alone to tide over a few months and keep a baby quiet at any hazard, but to lay the foundation for strong and vigorous childhood. He will fail to accomplish this if he prescribes a food lacking in its essential elements, though the child may for a few months seem to digest it more readily.

Generally speaking, persons who seek treatment for being too fat, have good appetites, are healthy and strong. Their greatest need is exercise, but this they find harder to take than anything else. In illustration of their docile submission to treatment—not involving restraint—Dr. I. Zangwell, at a recent dinner of the Maccabees, told the following story: "The fat girl of C., gentlemen, is not a myth, nor a show person, but a solid private reality that I have seen. Her fatness weighed upon her, so she went to a physician to be rid of some of it. He drew up a careful dietary; she was to eat dry toast, plain boiled beef, etc., and to return in a month to report reduction. At the end of the month she could hardly get through the doctor's doorway. He was aghast. 'Did you eat what I told you?' he asked. 'Religiously.' His brow wrinkled itself. Suddenly he had a flash of inspiration. 'Anything else?' he asked. 'My ordinary meals.'"—*Annals of Hygiene.*

* Editorial in *Archives of Pediatrics.*

SOCIETY REPORTS.

THE PHILADELPHIA PEDIATRIC SOCIETY.

Stated meeting, April 13, 1897.

J. P. CROZER GRIFFITH, President, in the Chair.

DR. THOMPSON S. WESTCOTT reported

A Case of Influenza, with Persistent Respiratory Failure, in an In ant of Four Weeks.

(See Page 166.)

DISCUSSION.

DR. F. A. PACKARD.—This case is very interesting from many points of view, particularly in one, that is in connection with the discovery of Guiteras and White in the epidemic that occurred next before that of 1889 and 1890, of distinct lesions of the pneumogastric nerve. This would explain many of the present symptoms present in Dr. Westcott's case.

DR. ALFRED HAND.—As Dr. Westcott has stated, I had charge of this case for a time, but there was practically nothing for me to do, except watch the child. The effect of antipyrin in controlling the attack was wonderful, and this strengthens the view that they were centric in origin. The one attack of respiratory failure that I saw, a very mild one, seemed to be centric.

DR. WESTCOTT.—There is very little more to be said in connection with the case, except in regard to the point of the value of antipyrin in this particular case. As I said in the paper, it is quite possible that the child was beginning to get better before the antipyrin was administered. Looking at it now, I am inclined to attach rather more importance to that fact than I was at the time when I began its administration. It seemed, however, as if there was no hope at all. None of us expected the child to recover, and, although I am usually rather hopeful about illness in children, I had about given it up; in fact, during the night it seemed almost cruel to keep up the rather heroic and somewhat brutal treatment to which this baby was subjected.

I am well aware that in children sometimes, especially in cerebral conditions, marvelously rapid changes take place in the circulatory conditions. I remember very distinctly, some five or six years ago, seeing a case of epidemic cerebro-spinal meningitis with Dr. Curtin. We saw the child one morning. It was absolutely comatose, and we both left the house, having given the child up. Within half an hour the father came to my office, asking me to come back and see the child, as it was asking for something to eat. This child subsequently made a very satisfactory recovery. That was a lesson which I have never forgotten—never to give up a sick child until it is absolutely dead, and I think this was a lesson that constrained me to keep up the treatment with this little baby as long as we did, and which finally resulted very satisfactorily.

As to the point raised by Dr. Packard, I feel inclined to maintain, in view of the positive evidences of cerebral involvement and their rapid subsidence in conjunction with the residual strabismus and the occurrence of at least one cerebro-spinal convulsion, that the principal seat of the lesion was at the base of the brain, though the existence of some pneumogastric disturbance cannot be positively denied.

DR. E. E. GRAHAM presented a child with

Natal Teeth.

(See Page 166.)

DISCUSSION.

DR. J. MADISON TAYLOR.—I regret that I did not bring a specimen to show of quite a similar tooth extracted by me at the Children's Hospital. The child was brought to me because the mother was suffering from laceration of the nipple from the tooth. I thought it was needless for the child and doubtless damaged the mother, and I easily extracted it, after the manner of the Chinese, with my finger and thumb. The child had it at birth, or immediately thereafter, and it was one of the lower central incisors, as I believe this is. I have seen two such cases.

DR. F. A. PACKARD.—I assisted Dr. McCoy in a case interesting in this connection. It was that of a woman 48 years old, born with central incisor of the upper jaw. It was extracted, and as a result a mass of callus formed in the upper jaw, and when a permanent tooth developed it was deflected, and Dr. McCoy removed it from the nostril, from which there had been, since childhood, persistent purulent discharge. The operation gave permanent relief to the nasal condition. In regard to the frequency of occurrence of congenital teeth in the same family, Dr. Benton reported in the *Journal of the American Medical Association* the case of his wife, who had had two children, each born with teeth, and who herself had teeth at her birth.

DR. MILLER.—I would like to ask Dr. Taylor why he removed that tooth. We should remember the child doesn't get another until seven years old.

DR. J. MADISON TAYLOR.—I would say that the tooth was quite loose, could be of no service to the child, and lacerated the mother's nipple each time the baby took nourishment.

DR. J. P. C. GRIFFITH.—Shakespeare refers to Richard III being born with teeth, this accounting for his savage nature.

DR. ROSENTHAL.—I have seen a number of such teeth. They seem to wear down from constant sucking, become rounded, and, after two or three years, drop out, just as first teeth of childhood. I have never seen such trouble from them as Dr. Taylor describes.

DR. E. E. GRAHAM.—In regard to the removal of these teeth, in the majority of cases they are loose, badly formed, poorly nourished and drop out. It is hardly necessary to remove them in the majority of cases. I think they should not be removed unless they are doing damage to the breast of the mother.

DR. J. MADISON TAYLOR presented a case of

Recovered Concurrent Typhoid Fever and Tuberculosis.

The patient was a young girl ten years of age, who had been treated in the children's ward of the Polyclinic Hospital for a thoroughly well-marked attack of typhoid fever, during the course of which acute tuberculosis of the lungs manifested itself, producing profound prostration and emaciation. The child was apparently perfectly well, having gained thirty pounds in weight, the pronounced lesions distinctly demonstrable in the right lung, and lesser lesions in the left lung being now healed.

At one time a bronchus was perforated, and a large amount of fetid pus and fragments of lung tissue were expectorated. The temperature chart exhibited showed great fluctuations, which were controlled more or less by prompt, cool spongings. Digestion was maintained well, and this enabled life to be saved. The remarkable point was the intensity of both processes, yet recovery followed.

DR. J. M. O'MALLEY read a paper upon

Typhoid Fever in Children, with Report of a Family Epidemic.

DR. JOSEPH LEIDY reported

A Case of Typhoid Fever, with Persistent High Temperature in a Child Three Years of Age.

(See Page 167.)

DR. J. P. CROZER GRIFFITH read a paper upon

Fetal Typhoid and the Widal Reaction in the New-Born.

He reviewed some of the infections diseases in which there was reason to believe that an attack might occur in utero. He referred to the greater difficulty in determining the possibility of this occurrence in typhus fever, owing to the less characteristic symptoms which the disease exhibits. Still, there are cases reported in which typhoid bacilli have undoubtedly been found in the fetal tissues, and he reviewed some of the literature bearing upon this. Finally, he referred to the few experiments which have been made with the Widal test in the blood of the fetus and new-born, and reported a case in which he had obtained a positive reaction in the blood of a child born from a typhoid mother.

DR. J. H. JOPSON read a paper upon

A Case of Osteomyelitis and Septicemia in the Course of Typhoid Fever.

(See Page 167.)

DR. A. O. J. KELLY read a paper upon

A Case of Typhoid Fever in a Child 18 Months Old.

(See Page 168.)

DISCUSSION.

DR. E. ROSENTHAL.—It has been my experience to see typhoid in children mostly after the age of two years. I can only record one case of an infant that had typhoid fever, and this case was left in my charge by Dr. Owen. The mother contracted typhoid herself, and the child's symptoms were very suggestive of the same disease. After weaning and placed upon suitable diet and treatment, it made a good recovery. It was about three months old. No bacteriologic tests were made, but the fact that the mother had typhoid seems to strengthen the diagnosis.

The cases of typhoid fever that I have seen have a different course from those presented to-night. They have often shown nervous symptoms to such an extent that the diagnosis could not be established between meningitis and typhoid fever.

In two cases I have seen, with consultants, I have made a diagnosis of typhoid in opposition to theirs of meningitis. The diagnoses were never confirmed, but the fact that other members of the same families sickened with typhoid about the same time lends support to my view.

At the present time I have a little child two years and six months old ill six days with typhoid symptoms, and Dr. Pease, of the city bacteriological laboratory, has just told me that the Widal test is positive. A great deal of stress has been laid upon the mild character of the typhoid fever in children. This I believe erroneous, as dangerous cases are, I believe, as frequent in children as in adults. The chart Dr. Leidy has presented shows the kind we meet with in our part of the city, where the people are afraid to use water. I have not seen hemorrhage from the bowel, but the nervous symptoms upon which I lay such particular stress I find are the most prevail-

ing symptoms down among this class of people.

I was interested in hearing the mention of typhoid following scarlet fever. I had one case which went through a typical course of typhoid immediately after being discharged from the municipal hospital, where it had had scarlatina. I have also seen typhoid follow chicken-pox

DR. MUEHLECK.—The peculiar behavior of the leucocytes in typhoid fever is a point which has been often overlooked, and yet it is one of great importance in our differential diagnosis. Since the investigations of Widal, von Limbeck and others, we know that in contradistinction to a pronounced leucocytosis, which almost invariably superinduces in most of the infectious diseases, there is not only an absence of such increase, but an actual decrease of leucocytes in typhoid fever. So much so, that this decrease is often to the extent of 1,800 in the cubic millimetre. This is remarkable, because it has been shown that the proteids of Eberth's bacillus are positively chemotactic; that is, they attract the leucocytes. I think Dr. Rosenthal's point might very quickly have been cleared up in this way: In meningitis simplex, we have a remarkable increase in leucocytes, while in typhoid fever we have a decrease.

DR. J. N. BROWN read partial notes of a case of typhoid in a child of nine years which was complicated in the third week with pneumonia. The temperature ranged high, occasionally reaching 106 degrees, but under energetic hydrotherapy the case resulted in good recovery.

DR. MILLER.—Did Dr. Griffith say that the mother's milk was tested in your case?

DR. GRIFFITH.—It was not.

DR. MILLER.—It seems to me, in view of the statistics of Dr. Northrup, of the New York Foundling Hospital, and they must be very accurate, we ought to be very cautious in making the diagnosis of typhoid fever in infants. I have seen a great deal of typhoid fever in children, but I have never seen a case under three years of age. Unless we can find the rose spots and have a more or less typical fever, I do not think we are justified in making the diagnosis in infants. Nor are we helped either at the post mortem table. The fact of enlarged solitary follicles, enlarged Peyer's patches and enlarged spleen are not sufficient to establish diagnosis of typhoid fever post mortem. I had abundant opportunity to verify this in making a number of autopsies at the Sheltering Arms, with which I was once connected.

The similarity of the lesions of children dying from intestinal catarrhs with the lesions of typhoid fever is striking. We have the swelling of the solitary follicles, Peyer's patches and of the adjacent lymph glands. Dr. Arthur V. Meigs has pointed this out, and some years ago, at the Pathological Society, he presented specimens from the same institution showing this same point. We must exclude malaria plasmodium, and we should also bring to our aid the newer methods, particularly the Widal test, before we can establish a diagnosis of typhoid fever in infants, unless we have the rose spots.

DR. JOSEPH LEIDY.—I confined my remarks entirely to the temperature of the case which I reported, without going into the symptoms. The nervous symptoms of this case were classical. The aphasia in the fourth week was marked. There were two adults in the same family who had suffered from typhoid fever, and had made excellent recoveries. There were no complications, except those already noted.

PERISCOPE.

The *Laryngoscope* says: **The improvement in the application of the X-rays** has extended to such a point that the location of coins, etc., in the esophagus has become an easy matter. Foreign bodies as large as 15 millimeters are easily swallowed by children. They are usually arrested at the narrowest portion of the esophagus, and, if they stand upright, it is difficult to recognize their presence by the usual methods. If the children continue to drink and swallow, and do not complain of pain in these cases, radiography is of great advantage, as it shows the exact location of the object. An incision down to the esophagus will then allow the object to be forced upwards and extracted through the mouth, thus avoiding an incision into the organ, and not interfering with alimentation afterwards.

A Case of Hemophilia.—A boy sustained a wound in the region of the temple about three-fourths of an inch in length, and during two days various atempts were made to stop the hemorrhage without effect. The boy was completely exhausted and feverish. I took from a vein in the arm of a healthy woman with a hypodermic syringe about a dram of fresh blood, and injected into the bleeding wound; the foreign blood clotted in a short time, and the hemorrhage was arrested after a light protective bandage was applied. The clotted foreign blood acted like an elastic tampon in all the interstices of the wound, or else the foreign blood supplied the particular ferment for thrombosis of the vessels which is deficient in the blood in cases of hemophilia.—**Bienwald, in *Deutsche Medicinische Wochenschrift.***

Seal upon Physician's Lips no Shield for Unlawful Acts.—In the case of Hauk vs. State, where the Supreme Court of Indiana affirmed a conviction of producing abortion, the court holds that the rule declared by the statute, which forbids a physician to reveal in evidence matters discovered by him in the course of professional attendance or treatment of a patient, is intended to protect the latter and not to shield one who is charged wih perpetrating an unlawful act upon the patient. The statute, it insists, cannot be so construed as to permit a party charged with crime to invoke it as a weapon of defense in his own favor instead of its being used as a protection to his victim. This interpretation, in its opinion, accords with reason and is supported by authority. On these grounds the court holds that it was not error to permit the physician who attended the patient in question, at the request of the defendant, at the time of her alleged miscarriage, to give evidence of what he discovered upon an examination of his patient during his attendance, and also the fact that the miscarriage occurred while he was present as her physician. The fact that her death may have resulted from the improper treatment of her physician or otherwise, it further holds, would not operate to defeat the conviction, under the statute, of the one who produced her miscarriage by an unlawful antecedent act.—*Jour. A. M. A.*

Dr. W. O. Roberts, professor of surgery in the University of Louisville, has recently had two cases of **blindness from shock**. One was a young woman, eighteen years of age, who fell down a flight of stairs, about ten steps, and was unconscious only for a few minutes. When seen, half an hour after the accident occurred, she was very nervous, pulse 100, pupils largely dilated, and she was perfectly blind. This condition lasted for four or five hours. Her sight then gradually returned, and she has had no further trouble. The other case was a child, four years old, who was in a spring-wagon, the horse and wagon standing near the curbing, when something startled the horse and he ran away. The wagon struck the edge of the curbing and the child was thrown out into the street; when picked up she was perfectly unconscious. This unconsciousness lasted for two hours. When the child was finally aroused it vomited freely, the pupils were widely dilated, and she was perfectly blind. It was fully two hours before the child was able to see at all; some six hours after the accident occurred, blindness had disappeared and the pupils were normal.—*Am. Jour. Surg. and Gyn.*

Thiersch's solution, so much employed now in surgery, consists of one part of salicylic acid, eight of boracic acid, and a thousand of water.—*Ry. Surg.*

Salicylic acid in large doses may cause **Green Urine**.—*Medical Times.*

Experience has shown that **Toxic Symptoms** may arise from the incautious use of many drugs, etc. That is why adverse reports should be as critically received as favorable reports on new remedies. The latter are no more prompted by optimistic enthusiasm than the former by pessimistic prejudice.—TIRARD, *Summary of Therapeutics.*

A small proportion of those attacked with **mumps suffer also from aural complications**. As a result slight deafness may ensue, but more usually the impairment of hearing is absolute and permanent. The attack usually comes on between the fourth and eighth days, and declares itself by impaired hearing, tinnitus, dizziness, nausea, and finally, by labyrinthine deafness. Extension of disease from the parotid to the ear is variously explained; (1) Owing to metastasis; (2) direct extension of the inflammatory process through fissures adjacent to the inner ear; (3) from the outer to the middle ear and thence to the labyrinth; (4) by way of the Eustachian tubes. In eight cases noted by the author, a striking feature was the frequency with which the left ear was attacked, viz., in five of the cases. In all the author's cases both parotids were affected, but no metastasis was found in the vestibule. In three cases the ear trouble began and ended in the middle ear; in one case it began in the middle ear and extended to the internal ear; in three cases it began and remained in the internal ear; and in one case it began in the internal ear and semi-circular canals and extended first to the middle ear and later on to the cochlea.—*New York Medical Journal.*

The Question of What Produces and What Prevents Ankylosis of Joints.—In replying to Dr. A. M. Phelps, in the *Postgraduate* arrives at the following conclusions: 1. That a normal point will not become ankylosed by simply immobilizing it for five months. 2. That motion is not necessary to preserve the normal histological character of a joint. 3. That when a healthy joint becomes ankylosed, or its normal histological character changed, it is not due to prolonged rest, but to pathological causes. 4. That immobilizing a joint in such a manner as to produce and continue intra-articular pressure will result in destruction of the head of the bone and the socket against which it presses. 5. That atrophy of the limb muscles will follow prolonged immobilization of a joint. The question of ankylosis is determined by the severity and duration of the inflammation, the presence of intra-articular pressure, the subsequent cicatricial contraction of soft parts around the joints, the tissues involved and the amount of destruction of bone and cartilage. Inflamed joints treated upon the plan of absolute immobilization, and the relief of intra-articular pressure, furnish by far fewer cases of ankylosis, limited motion and deformity.

Considering the Permanent or Later Results of Fracture of the Skull, Dr. Wiliam M. Bullard (*Boston Med. and Surg. Jour.*) reaches the following conclusions: 1. Out of 70 persons with fractures of the skull, 37 presented no symptoms when examined some time later. 2. Seven persons only presented serious symptoms, and in at least four of these it is doubtful whether the symptoms were due to the injury. 3. The most frequent consequences found were headache, deafness, dizziness and inability to resist the action of alcohol on the brain. 4. Out of the 15 cases in which operation (trephining, etc.,) was performed, 12 had no symptoms; in another it was doubtful whether the symptoms present were due to the injury; in another the symptoms were slight (headache, rare, tension over wound while lying in bed); the other was deaf, but had no other trouble. We are justified, therefore, in concluding, so far as our statistics lead, that those cases in which trephining was performed have shown much better results, as far as the symptoms discussed are concerned, than those in which no operation was performed.

Ollier (*Rev. de Chir.*, April, 1897) points out that **abnormal cavities in bone resulting from injury, disease, or surgical operation** are not readily filled up, when wide and deep, by reason of the rigidity of their walls. Such cavities, except in young and growing subjects, are not, as a rule, obliterated by the growth from the osseous walls of granulations of medullary origin. This failure of repair is more particularly observed in cases of tuberculosis of bone. When a view to the more effectual obliteration of such cavities, which occur most frequently and are most difficult to deal with in the tibia and os calcis, the author proposes to suppress or to mobilize one of the osseous walls so as, in the former case, to allow the periosteum to come in contact with the opposite wall, and, in the second case, to bring together the osseous walls themselves. When one of the osseous walls of the cavity has been removed, the corresponding portion of periosteum and attached soft parts sinks into the cavity, and comes into contact with the opposite wall. The resistance of the bone is temporarily diminished by this operation, but the deposition of new bone soon affords the necessary solidity. The suppression of one of the walls of an osseous cavity is especially indicated in cases in which the affected bone has become hypertrophied under the influence of osteomyelitis. In cases in which there is very little, if any, hyperostosis, it would be better, it is stated, not to sacrifice any part of the osseous walls of the cavity, but to render it mobile by partially detaching it in the form of an osseous flap or valve, which can be applied to the opposite wall of the cavity, and, in some instances, be fixed to it by a screw or peg. The cavity, it may be anticipated, will now become obliterated by granulations which, though exerting no effect on a rigid wall, will act cicatricial reaction on the mobile surroundings. The surgeon may form multiple osseous flaps according to the form and disposition of the cavity, or he may make use of flaps taken from other parts of the same, or even from an adjacent bone, and displaced by either simple gliding or partial torsion of the periosteal pedicle.—*British Med. Jour.*

A Lump in the Groin.—In case of it is "hernia against the field." The first question is: "Is the patient vomiting?" The second, "Are the bowels moving freely?" Such a swelling may be: 1. Hernia. 2. Enlarged gland; (a) from strain; (b) from anal fissure; (c) ovarian sepsis; (d) vaginal sepsis; (e) wound or sore of toe or leg; (f) venereal disease. 3. Aneurism. 4. Sarcoma. 5. Psoas abscess. But in the diagnosis it is "hernia against the field."

Aneurysm Simulating Spinal Disease. A woman thirty-seven years of age had been advised to seek mechanical treatment for spinal disease. The principal symptoms were radiating pain in the back, loss of flesh, aphonia, and occasional dyspnea. Examination revealed a pulsating tumor at the lower part of the carotid triangle and a decided aneurysmal bruit.—*Lancet.*

The Treatment of Aphthous Stomatitis.—Levi, of Venice (cited in the *Journal des praticiens* for July 3d), gives the following formulæ for topical application five or six times a day:

℞ Borax ..... 4 parts;
Tincture of myrrh..... 8 "
Syrup of mulberries..... 60 "
M.

℞ Borax ..... 4 parts;
Tincture of benzoin..... 2 "
Distilled water..... 10 "
Syrup ..... 20 "
M.

℞ Sodium phosphate..... 10 parts;
Orange-flower water..... 25 "
Honey of roses..... 50 "
M.

℞ Salicylic acid..... 2 parts;
Alcohol ..... 10 "
Glycerin ..... 20 "

In severe cases the following may be given internally:

℞ Potassium chlorate..... 1 part;
Distilled water..... 90 parts;
Syrup of raspberries..... 10 "
M. S.: A teaspoonful every two hours.

—*N. Y. Med. Jour.*

An Application for Vegetations.—The *Gazette hebdomadaire de medecine et de chirurgie* for July 11th gives the following:

℞ Distilled water..... 50 parts;
Tincture of thuja..... 5 "
Tincture of cicuta..... 1 part;
Potassium bicarbonate.... 2 parts.
M.

—*N. Y. Med. Jour.*

Czerny (*Muench Med. Woch*) observes that, whereas some twenty-five years ago there were numerous records of carbolic acid intoxication, yet even in that period the **occurrence of gangrene was rarely reported** (*Brit. Med. Jour.*) After referring to some recorded cases, Czerny observes that hardly a semester passes in his clinic without a case of carbolic acid gangrene presenting itself, and he warns his students against the use of watery solutions of this agent. He gives details of three cases recently admitted to his clinic. In all the cases the carbolic acid solution was applied for a wound of a finger. Gangrene supervened, and amputation became necessary. This gangrene is of the dry kind. The anesthetic action of carbolic acid induces the patient to leave the dressing on. The part first becomes grayish white and eventually black without any sensation of pain. Circulatory disturbances caused by firm bandaging, inflammation, or a severe injury predispose to it. The above named patients were in robust health, and the injuries were not such as to induce gangrene by themselves. In two of the cases a three per cent. solution of carbolic acid was applied, but it was kept on for several days. The duration of the application is more important than the concentration. The author concludes that since with any solution of carbolic acid gangrene may, under certain circumstances develop, this agent should be altogether avoided as a dressing, and other antiseptic solutions used.

Discussing **Ulcer of the Stomach**, M. Hayem (*Med. Press*) said he observed recently a man aged 54, who for several years suffered from painful digestion, so much so as to provoke ideas of suicide. The pain was felt in the region of the pylorus and was accompanied sometimes by vomiting, and finally hematemesis set in, producing great suffering and emaciation. A milk regimen was tried without any relief. The diagnosis was ulcer of the stomach and stenosis of the pylorus. He advised the patient to submit to gastro-enterostomy. The operation was performed by M. Tuffier, and the result was a considerable abatement in the gastric pain and at present the patient is in a satisfactory condition.

NEWS AND MISCELLANY.

Expressed in time units, the distance between **Cape May, N. J., and Philadelphia, is 100 Minutes**—measured by the "Century Flyer" over the route of the South Jersey Railroad.

This, and like marked reductions in time to other points, in connection with the superior modern equipment, splendid service, and capable management attained by the railroad, easily accounts for recent great increase of travel to the health resorts along the southern coatst of New Jersey.

Pruritus.—A combination attributed to Brocq and Jacquet is

℞ Ammonium valerianate, 1 part.
Syrup of mint, 20 parts.
Linden-water, 125 parts.

M. Sig.: From two to four spoonfuls a day (whether teaspoonfuls or tablespoonfuls is not specified).—*New York Medical Journal.*

Lycetol in the Treatment of Renal Colic.—Wettzack (*Gazette hebdomadaire de medecine et de chirurgie*, July 11, 1897) recommends this formula:

℞ Lycetol ..... 23 grains;
Sodium bicarbonate..... 8 "

M. Such a mixture to be taken twice a day, morning and afternoon, in a glass of Vittel or Contrexéville water.

—*N. Y. Med. Jour.*

Europhen in the Treatment of Burns.—The *Gazette hebdomadaire de medecine et de chirurgie* for July 11th attributes the following formula to Seibel Nolda:

℞ Europhen ..... 1 part;
Lanolin, Vaselin, } each ..... 10 parts.

M. To be applied three or four times a day to burns to the degree of rubefaction or vesication.

—*Med. Record.*

The Treatment of Parasitic Baldness.—Sabouraud (*Concours medical*, June 19, 1897; *Lyon medical*, July 4, 1897) recommends two ointments. The first, which is cheap, is made according to the following formula:

℞ Turpeth mineral..... 45 grains;
Essence of lemon..... 20 drops;
Vaselin .....900 grains.

M.

The second ointment is very expensive, but, says the author it is cheaper to regain one's hair with this pharmaceutical treasure than to buy a wig.

The formula is as follows:

℞ Quinin, Pilocarpin, } each ..... 4 parts;
Precipitated sulphur..... 10 "
Balsam of Peru..... 20 "
Beef marrow.....100 "

M.

—*Med. Record.*

Dr. W. H. Rumpf of Chicago, in reporting a case of **uterine fibromata in pregnancy**, in the *Am. Gyn. and Obst. Jour.*, emphasizes the following points:

1. Fibroid tumors do not predispose to any great extent to sterility.
2. Fibroids in pregnancy, during labor and in the puerperium, represent dangerous complications in only a small number of cases.
3. Too active operative interference should be carefully guarded against.
4. The operation for the removal of tumors should not be postponed until some months after confinement.